

EXECUTIVE
Stenographic Transcript Of
SESSION
HEARINGS

ORIGINAL

Before The
SUBCOMMITTEE ON AIR AND WATER POLLUTION

COMMITTEE ON PUBLIC WORKS

UNITED STATES SENATE

A BILL TO AMEND THE CLEAN AIR ACT, AS AMENDED,
AND FOR OTHER PURPOSES

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Washington, D. C.

AUGUST 4, 1970

Alderson Reporting Company, Inc.

Official Reporters

300 Seventh St., S. W. Washington, D. C.

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EXECUTIVE SESSION

A BILL TO AMEND THE CLEAN AIR ACT, AS AMENDED,
AND FOR OTHER PURPOSES

TUESDAY, AUGUST 4, 1970

United States Senate,

Subcommittee on Air and Water
Pollution of the Committee on
Public Works,

Washington, D. C.

The subcommittee met at 2:50 p.m., pursuant to call, in
room 4200, New Senate Office Building, Senator Edmund S. Muskie
(chairman of the subcommittee) presiding.

Present: Senators Muskie, Spong, Eagleton, Cooper, and
Boggs.

Staff Members Present: Richard B. Royce, chief clerk and
staff director; Bailey Guard, assistant chief clerk, minority;
M. Barry Meyer, counsel; Leon Billings, Tom Jorling, Jim Jordan,
Richard Grundy, Hal Brayman, and Phil Cummings, professional
staff members.

Senator Muskie. All right, page 33, Federal Procurement.

We have two more areas to cover, and then we go back to
pick up the unresolved problems. Federal Procurement.

Mr. Billings. We really haven't gotten over Section 119,
but it is essentially identical language as that which appears in

1 the Water Pollution.

2 Senator Muskie. Well, let's look at Section 119:

3 "Each agency of the executive, legislative, and judicial
4 branches of the Federal Government having jurisdiction over any
5 real property or facility, including any vehicle or vessel which
6 it owns and operates, or engaged in any activity resulting, or
7 which may result in the discharge of air pollution agents or
8 combination of such agents, shall comply with the requirement of
9 this Act in the same manner as any person must so comply in the
10 administration of such property, facility, or activity."

11 You say this is identical?

12 Mr. Billings. That first sentence is essentially similar to
13 the language we had first, subsection (a), Section 21 of the Water
14 Pollution Control Act. We have added "aircraft, vehicle, and
15 vessel," because of the moving sources question in Title II.

16 Mr. Jorling. This language is almost identical to the
17 House-passed bill as well.

18 Mr. Billings. Then the next language is, I think, similar
19 to the language the conferees agreed upon, about the exceptions
20 about the basis of paramount interest. The next language is no
21 such exemption shall be in excess of a period of one year, and
22 the requirement that the President report exemptions.

23 Senator Muskie. All right, any question about that?

24 Mr. Jorling. There is one point, and the staff has con-
25 sidered this language about the President's exemption. It appears

1 here he could make a blanket exemption of an entire Federal
2 agency, which I don't think is the intent, and it has been sug-
3 gested that we add language that would restrict the exemption to
4 "any property, facility, vehicle, vessel of such agency" rather
5 than "such agency."

6 "Exempt any such agency" appears in the 12th line down.
7 And then relate that language back to the third line. "Any
8 property, facility of such agency."

9 Senator Boggs. Yes.

10 Senator Muskie. All right.

11 Mr. Billings. I assume that it was an oversight leaving
12 aircraft out. It should be "vehicle, aircraft or vessel," right?

13 Mr. Jorling. Yes.

14 Senator Boggs. Okay, that looks good.

15 Senator Muskie. All right, then we move on to Federal
16 Procurement, Section 120:

17 "(a) Any person (1) required to comply with a final order
18 issued by a Federal court pursuant to section 112, 113, 115, or
19 117 of this Act who fails to comply within the time period speci-
20 fied in such order, or (2) convicted by a Federal court for a
21 knowing violation of any applicable implementation plan, including
22 any emission requirement standard, or standard of performance,
23 shall be ineligible to enter into any contract with any Federal
24 agency for the procurement of goods, materials, and services to
25 perform such work at or with any facilities owned, leased, or

1 supervised by such person which are subject to such action by
2 the court. Such ineligibility shall continue under paragraph (1)
3 of this subsection until the Secretary certifies compliance with
4 such order, or under paragraph (2) of this subsection, during the
5 three-year period following the date on which such agency receives
6 notification thereof from the Secretary."

7 Senator Boggs. Let's read that: "during the three-year
8 period."

9 Senator Muskie. In other words, paragraph (1) is failure
10 to comply with an order of the court, and the second is conviction
11 by a court.

12 Now the first one establishes ineligibility, until the
13 Secretary certifies compliance with the order. In the case of
14 a conviction, he is ineligible for three years.

15 Is three years too rough?

16 Senator Boggs. I don't know whether it is or not.

17 Mr. Jordan. Knowing violation.

18 Senator Boggs. He was susceptible to a \$25,000-a-day fine,
19 too? Where is that?

20 Mr. Billings. If he is convicted of a knowing violation,
21 he is subject to a crime penalty. The question is whether
22 a person convicted of a crime violation should be eligible for
23 Federal contracts during the three-year period, or some period
24 of time.

25 Senator Muskie. Some period. Three years is quite a period.

1 Senator Boggs. I think it is, too, and after all, job
2 opportunities, we want to encourage them, rather than -- we want
3 to do both.

4 Mr. Jordan. It is particularly rough, I think if it
5 were a result of some act on the part of some executive who was
6 later fired, and I think you penalize the company.

7 Senator Boggs. Any company, knowing violation, loses con-
8 tract rights for three years.

9 Senator Muskie. That could be a hell of a thing. A fine
10 of \$25,000 a day.

11 Mr. Royce. Like the Mayor of Boston, who ran for the House
12 of Representatives from jail.

13 Mr. Billings. That is public.

14 Senator Muskie. Yes, but he wasn't declared ineligible to
15 run for three years.

16 Mr. Royce. That's right.

17 Senator Boggs. I don't know. Any company in knowing viola-
18 tion. You want to make it one year? Do you want something in
19 there like that, or is it just a monetary penalty? I suppose you
20 need something in, don't you?

21 Senator Muskie. Yes. They certainly ought not to be able
22 to -- I think there is a good case to be made for rendering them
23 ineligible during the period when they are in violation.

24 Senator Boggs. Right.

25 Senator Muskie. You don't want the Government dealing with

1 polluters.

2 Senator Boggs. As long as they are in violation, they lose
3 the right to the contract, period.

4 Senator Muskie. But that may be meaningless, because they
5 might correct -- well, what is the purpose of this? Is it
6 intended as another penalty, or is it intended simply during the
7 period of violation to exclude them from contractual relation-
8 ships with the Federal Government?

9 Do we regard it as an additional penalty?

10 Mr. Royce. Hasn't this been picked up from some other bill?

11 Mr. Jorling. A brief bit of background, yes. This is
12 basically the Senator Cook bill, 3410 -- or not 3410, 3416, or
13 some number that is presently before the committee. There was
14 a similar provision in your legislation, your draft legislation,
15 which was more just a "no Federal agency shall contract with
16 anybody that is in violation."

17 Senator Cook's staff intends this, and wrote it with the
18 intention that it would be a penalty.

19 Senator Muskie. An additional penalty?

20 Mr. Jorling. Not just a suspension during the period of
21 noncompliance, but in fact, an added coercion for compliance,
22 by setting forth a penalty of noneligibility for Federal contract.
23 That was their intention.

24 Senator Muskie. Did they take into consideration the other
25 penalties that we have written into this bill? Or anything like

1 them?

2 Mr. Jorling. No, this was drafted before.

3 Senator Muskie. Was that regarded as a single approach
4 to the problem?

5 Mr. Jorling. No, it was not intended as a single approach,
6 because it was offered as an amendment to the Clean Air Act and
7 the Water Quality Act respectively, but as those Acts presently
8 exist, the penalty provisions are much less severe than in this
9 draft legislation. They were -- I think \$2500 is the maximum
10 fine under the existing law.

11 Mr. Royce. Mr. Chairman, it could be self-defeating, in that
12 we might have a very large corporation doing some vital research
13 and development under the Air Pollution Act, the Air Quality
14 Act, and if there is a \$25,000-a-day penalty, plus jail sentence

15 ---

16 Senator Muskie. You are really piling it on.

17 Mr. Royce. How much coercion is required?

18 Mr. Jorling. Again, Dick, that is assuming that any court
19 imposed the \$25,000 fine.

20 Mr. Royce. Or if it is \$10,000, and only a year in jail.
21 That is enough to make ---

22 Mr. Jorling. What if the court didn't impose any fine?

23 Senator Muskie. Well, if the court found reasons not to
24 impose a fine, there is no way to make that judgment applicable
25 to the imposition of this penalty.

1 Mr. Royce. That's right.

2 Senator Muskie. And wouldn't that judgment be as relevant
3 to this penalty as to the \$25,000 fine?

4 Mr. Jorling. I guess that would be dictated whether Con-
5 gress ---

6 Senator Muskie. In other words, there would be extenuating
7 circumstances that a court could take into consideration, but that
8 no one could take into consideration in imposing this penalty.

9 Senator Boggs. Maybe that's your point here; make this in
10 the discretion of the court, time up to not more than three
11 years.

12 Senator Muskie. I don't think the court ---

13 Senator Boggs. You don't want to put that in the court.

14 Senator Muskie. I really think what is involved here is --
15 at least my view of it was -- that somebody who was violating
16 this law should not -- of course, if you carry that too far, you
17 can get into all kinds of things. How about the Truth-in-Lending
18 Bill? How about the Packaging Bill? How about all this con-
19 sumer legislation?

20 And do you impose this penalty across the board as another
21 way of applying sanctions?

22 Mr. Billings. One of the difficulties is, Mr. Chairman, the
23 people who comply with pollution standards may have costs imposed
24 upon them which affect their bid for Government contracts
25 adversely against people who are not in compliance. In other

1 words, because the cost of pollution control can run anywhere from
2 10 to 20 percent of the cost of a facility, it could be a serious
3 economic disadvantage to someone who was operating in good faith.

4 Senator Muskie. What would be the effect of this upon con-
5 tracts in being? Look at the language from that point of view.

6 Senator Boggs. It's true.

7 Mr. Billings. It is close to operative, isn't it, Tom?

8 Mr. Jorling. Yes, in the original Cook version there was
9 provision dealing with the effect on present contracts, and would
10 require termination of any contract which was directly related to
11 the activity for which the conviction was rendered. The staff
12 has deleted that, as requiring a considerable amount of adminis-
13 trative interpretation of whether or not a contract was related
14 to the polluting activity, and not knowing who to place that
15 burden on.

16 Senator Muskie. In other words, where now they should be
17 ineligible to enter into any contract.

18 Mr. Jorling. This would be prospective to new contracts.

19 Mr. Billings. Prospective, so it couldn't be written into
20 the contractual agreement, in the first place; like your civil
21 rights clause and so on, the contractor would know what was
22 expected of him.

23 Senator Muskie. This is clearly related to the activity of
24 facilities which are on lease to supervisors.

25 Mr. Billings. And if the contract or the activity which is

1 to be performed results in pollution, then one would assume that
2 the contract's price would include the cost of controlling that
3 pollution. It would mean increasing costs for some Federal
4 procurement undoubtedly.

5 Senator Boggs. But you cover that on 35, don't you? With
6 (a)? They write into all new contracts?

7 Mr. Billings.. That's right.

8 Senator Boggs. So they are all on an equal footing.

9 Senator Muskie. Well, let me ask you: This appears to say
10 that if you fail to comply with an order, or are convicted of a
11 violation, therefore you shall be ineligible to enter into any
12 contract.

13 Mr. Billings. What would happen would be if you entered
14 into a contract ---

15 Senator Muskie. There are two situations. A request for
16 eligibility to enter into a contract, and then the effect on a
17 contract, intent to the effective date of this Act, of such a
18 failure or violation, after entering into the contract.

19 Now with respect to the first, does this mean that if they
20 are not -- you know, if you violated, say, an implementation
21 plan, five years ago, you have never had a contract with the
22 Federal Government, and the next year you bid on a Federal con-
23 tract, the fact that you were in violation five years ago makes
24 you ineligible now?

25 I mean, everything is cleaned up. You are in compliance.

1 Does this language mean that you can't enter into a contract,
2 because of that violation on your record?

3 Mr. Jorling. I would say no, on these facts. The time is
4 triggered by the date the agency receives notification, which
5 would be shortly after the conviction. And that would trigger
6 a three-year period. Following the running of that, I would
7 expect you would be free to contract.

8 Senator Muskie. Well, which agency? The agency handling
9 the contract. Well, at the time of the violation that agency
10 wasn't interested in the contract with Company X, so it receives
11 notification of the violation, if it receives it at all, at the
12 time that it begins the process of letting the contract.

13 So the three years could run, and you could impose that kind
14 of a disability.

15 Mr. Jorling. I think it would be more appropriate to refer-
16 ence the date to conviction, rather than to any notice.

17 Senator Boggs. It is not confined to a particular agency,
18 is it?

19 Mr. Jorling. No, this would be any Federal agency.

20 Mr. Billings. Wouldn't the basic policy be one that the
21 Federal Government shouldn't enter into a business arrangement
22 with someone who is in violation, and after this law is passed,
23 shouldn't continue in business with someone who goes into violation?
24 In other words, that the contract should not be entered into with
25 a company at the time.

1 Senator Muskie. If they are at the time in violation.

2 Mr. Billings. And if, as a condition of that contract, they
3 would be required to stay in compliance, and if they were not in
4 compliance, then they should be penalized.

5 Mr. Jordan. That is really covered, I think, in your
6 legislation under (c) (2).

7 Mr. Billings. I think it is, and I think that really the
8 (2) is in addition and really unnecessary. If the guy can't get
9 the contract if he is in violation, and he can't keep the contract
10 if he goes out of it, and that should be adequate incentive for
11 anyone.

12 Mr. Jorling. In view of the earlier increased sanctions
13 for the conviction, this could be interpreted, I think, as
14 unnecessarily punitive.

15 Senator Muskie. I think what we ought to do is reframe
16 this, so that its impact is that anyone who is in violation,
17 while they are in violation, should not benefit from a contract
18 with the Federal Government. I don't have the fine points of that
19 approach in mind, but I think that is what it ought to be, and
20 no more.

21 Mr. Royce. Could I ask a further question?

22 Senator Muskie. I don't know what that would do, exactly,
23 with a contract that is in being. Does it just suspend it, or
24 should it ---

25 Senator Boggs. It is a condition of the contract, when they

1 make it.

2 Senator Muskie. No, I am talking about, well, would it be
3 in every contract, that the Federal Government enters into from
4 now on?

5 Senator Boggs. It would be in every contract, yes.

6 Senator Muskie. Then what should be the conditions in that
7 contract? That a violation should terminate the contract, or
8 suspend it?

9 Senator Boggs. Suspend it, terminate or suspend.

10 Senator Muskie. What would suspension mean? Delay in
11 delivery to the Government? Then the Government is penalized,
12 not the company.

13 Senator Boggs. That's right. You have a problem there.
14 Well, it's true. If they wanted to get out of it, I suppose they
15 could pollute a little bit.

16 Senator Muskie. If they are having trouble meeting their
17 delivery schedules, they just pollute.

18 Senator Boggs. Require such person to turn at the time of
19 entering into such a contract adequate proof of compliance, with
20 any applicable implementation plan, including emission requirement,
21 emission standard, and standard of performance.

22 Mr. Jordan. Any additional cost resulting from the suspen-
23 sion would be borne by the contractor.

24 Senator Boggs. Off the record.

25 (Discussion off the record.)

1 Mr. Royce. There is a further combination there, if a
2 contract were suspended, in terms of the recovery of damages by
3 either the Government or the contractor.

4 Senator Muskie. Yes.

5 Mr. Royce. And a further combination as to how this would
6 apply with regard to a parent corporation, if the violator were
7 a partially or wholly-owned subsidiary.

8 Senator Boggs. That's right.

9 Senator Muskie. That's right. There are some sticky ---

10 Mr. Royce. I think the criminal sanctions are already
11 enough, Mr. Chairman, with the possibility of fine and jail sen-
12 tence.

13 Senator Muskie. Have you given Tom the outline of this
14 thing?

15 Mr. Billings. Yes.

16 Senator Eagleton. We are on this Federal procurement aspect
17 of it?

18 Senator Muskie. Yes. There are two questions involved, or
19 two situations. First of all, I think we are agreed that as
20 written, the language is too broad. With the two situations
21 that we ought to try to cover, if we cover it at all, is one of
22 the questions is why enter into the contract in the first place,
23 if a company is in violation.

24 I think I would have little trouble with that. And if a
25 company that is in violation of these requirements should not be

1 in a position to benefit from a Federal Government.

2 Senator Boggs. Not enter into a contract with them.

3 Senator Muskie. Violation of an order, well, I don't know
4 about the conviction in the court. If the violations aren't
5 cleaned up ---

6 Senator Eagleton. This is the first time I ever thought of
7 this. What if the complaint has just been filed, let us say, by
8 the Air Pollution Commission, the regional commission, of St.
9 Louis, against McDonnell Aircraft Company?

10 Senator Muskie. That is another problem.

11 Senator Eagleton. And they just filed it last week, and
12 McDonnell is about to get the F-15 award. It has just been filed.
13 They say, "You are polluting."

14 Senator Boggs. They had better stop polluting right fast.

15 Mr. Royce. By shutting down the plant so that they can't
16 fill the order.

17 Senator Muskie. They may say they are not in violation, but
18 before they could clear the hurdle posed by this legislation, you
19 know, the question has got to be settled presumably.

20 Senator Eagleton. Settled to whose satisfaction? Suppose
21 McDonnell says -- I hate to be the devil's advocate here, but it
22 is the only way I think you can rationalize some of this stuff --
23 McDonnell says, "This is a bum rap. There is a crazy Pollution
24 Commissioner down there that has got a yen on for us; we can't
25 even cough out here without him screaming bloody murder, and we

1 are as clean as a hound's tooth. We have got filters all over
2 everything, and it is just lovely out here, and it is a bum
3 rap, and we are not going to plead guilty to something that we
4 ain't guilty of."

5 Senator Muskie. So Uncle Sam has got to say, "Until this
6 issue is resolved, we are going to delay awarding this contract."
7 Or he says, "Because you are under a cloud, we just exclude
8 you from consideration."

9 Senator Eagleton. Which is just as bad.

10 Mr. Billings. The staff discussed at some length this ques-
11 tion of the complaint versus the order, and determined that being
12 that you really had an adversary relationship between the polluter
13 and the agency, that the provisions should only become operative
14 when it was a final order of the court, the decision had been
15 made.

16 Senator Muskie. Those who enter the contract, the complaint
17 is pending, you enter the contract, and then the court finds you
18 in violation? What do you do then?

19 "We have got all those boys in Vietnam waiting for these
20 planes."

21 Mr. Jorling. There is a provision for an exemption for
22 anything related to that.

23 Mr. Guard. Bring them home.

24 Senator Eagleton. McDonnell is not a polluter, but let me
25 just give you a specific case of how this did work. Complaints

1 were filed, I think, with EEOC about McDonnell, that is, different
2 workmen for applicants for jobs, blacks, alleged by affidavit or
3 however you file a complaint over there that they had either not
4 been hired or promoted. Most of it was promotion, as I recall
5 it now, because of their race.

6 It was just about the time, it was about three months ago,
7 or four months ago, when they were, you know, touch and go whether
8 it was going to be McDonnell or North American on the F-15. And
9 all hell broke loose, because it was alleged McDonnell was not a
10 fair employment contractor and McDonnell at the outset, of course,
11 said, "We are. We are as good in this as anybody else. We are
12 trying hard."

13 Finally, because of public pressure, they did enter some
14 kind of a voluntary order that, I guess, the EEOC -- I mean, this
15 is more than just not using McDonnell as a typical example. I
16 think they are very clean in terms of pollution, but I can see
17 where it becomes tricky, so that you would put, say, the Defense
18 Department, if a complaint had been filed, that had aroused pub-
19 lic concern. you know -- after all, a complaint against a big
20 company is headlines, "McDonnell Charged Polluter," and then the
21 Department of Defense says -- well, doesn't it put them under an
22 almost impossible psychological burden to go ahead and sign a
23 multi-million or a half-million dollar contract with an "alleged
24 polluter"?

25 I mean, doesn't the DOD then say, "We had better go to North

American, or Boeing or, you know, somebody that isn't hot? Too bad about McDonnell this time, but they are a little hot."

I don't have the answer. I am just saying that it could be more than just ---

Senator Muskie. There are all kinds of sticky things here.

Mr. Jordan. I think precisely the same dilemma is raised by language on page 35 in what must be (c) (2) (A), when as a pre-condition to entering into a contract, the agency has to receive satisfactory ---

Senator Muskie. Proof of compliance. Right, that would be an administrative problem.

Mr. Jordan. It would be, but it raises exactly the same dilemma that Senator Eagleton raises as to what would be satisfactory proof of compliance, prior to if McDonnell were charged by the Missouri Air Pollution Control Board or something, who under these regulations would be ---

Senator Muskie. Every bidder is going to have to go to the appropriate environmental agencies to get ---

Mr. Jordan. Which means that the State Air Pollution Commissioner becomes a contracts czar.

Mr. Royce. Just to extend Mr. Eagleton's discussion into a hypothetical realm, it is quite conceivable that in a very large contract, competitors might find some zealous environmental lawyer to bring action against a company, under the guise of a "citizens' action committee."

1 Mr. Jorling. You have that same problem confronting you,
2 Dick, with civil rights compliance, which is a term included in
3 every contract.

4 Mr. Royce. Yes.

5 Mr. Jorling. And I am not sure that is a legitimate charge
6 against this kind of a provision. You have got those things.
7 Any time you have got to determine a contract, you can find a
8 specious way of abusing it.

9 Mr. Royce. Yes, but there are a lot more variants here than
10 there are in the equal employment opportunity, and even there
11 many companies have been harassed by neurotic types who may just
12 not be very good workers, but don't get a promotion because they
13 are black.

14 Mr. Jorling. My own feeling would be the issues of proof
15 are much more complex in the area of civil rights than in this
16 area, where all they have got to do is show or make a statement
17 of compliance with the implementation plan than they are subject
18 to, and they meet the requirements of paragraph (a).

19 Mr. Royce. But we haven't shown this is implementation
20 plans yet, so it is hard to make a judgment on how many might
21 be involved.

22 Mr. Jorling. I suspect it will just be simply whether they
23 are in compliance with their scheduled compliance.

24 Mr. Billings. You have a relatively objective test. The
25 difficulty is not so much when proving one is in compliance. The

1 difficulty is when one is charged to be out of compliance, and
2 then makes the change and gets back into it. How long is he
3 penalized, and in what way is he penalized?

4 The violation of emission standard or control emission or
5 emission requirement, or even a timetable, is fairly objective.

6 Senator Muskie. Let's look at the narrowest possible ver-
7 sion of this concept.

8 Senator Eagleton. The burden of proof has to be carried
9 on the complaint. The mere filing of a complaint saying that
10 there is stuff coming out of these stacks is bad, and they say,
11 "Look, the way you measure it is one way; we have got other moni-
12 tors on this thing that say they are immaculate." It is not a
13 per se case and the Air Pollution Commissioner files a charge,
14 that that's the end, is it?

15 Senator Muskie. Let's look at the narrowest possible appli-
16 cation of this approach. You limit it to situations in which
17 there is an order, that was being violated by the potential con-
18 tractor or court conviction, where compliance needs to be estab-
19 lished. And in both of those instances you have the narrowest
20 position in which you would say, "Well, the Federal Government
21 ought not to give the benefit of a Federal contract, under those
22 circumstances."

23 Senator Eagleton. Certainly where there is a conviction.

24 Senator Muskie. Well, if there has been a conviction, and
25 the company has cleaned up, the conviction might take place

1 actually weeks or months after the situation has been cleaned up,
2 but if the situation has been cleaned up, then you get sticky
3 situations, when you say that for some period after conviction,
4 even though the company is then in compliance, it shall not be
5 eligible to compete in Federal contracts.

6 That's a difficult concept to sell, it seems to me. But
7 if they are in conviction, and haven't yet responded by comply-
8 ing with the standards, whatever they are, then in that situa-
9 tion you could make some case for using this approach. Are there
10 any holes in that?

11 Secondly, if they are under an order of compliance and
12 haven't yet established compliance, should they in that case be
13 ineligible? And if you go beyond those two narrow ones, aren't
14 you in a really uncharted area?

15 Senator Eagleton. What do you mean by an order? Suppose
16 the order is on appeal? That is, they have had a preliminary
17 hearing, at the lowest level of hearing, I don't know whether
18 that is the Air Commissioner or what-have-you, but he has found
19 them guilty. They say, "The hell with you, we are going to
20 appeal that to the next highest level."

21 Senator Muskie. The conviction could be under appeal, too.

22 Senator Eagleton. Sure.

23 Senator Muskie. What do you do in that instance? You at
24 least raise a cloud, even if you limit it to a final order, and
25 a final conviction, with appeal exhausted. You put the Federal

1 agency in a hell of a box.

2 Senator Eagleton. You mean the Federal contracting agency?

3 Senator Muskie. Yes.

4 Senator Eagleton. Psychologically they are in a hell of a
5 public affairs box. You know, "Department of Defense signs big
6 multi-million dollar contract with polluter."

7 And you can rest assured the companies that don't get the
8 contract -- I mean, North American and Fairchild and others --
9 under my hypothetical, that don't get the contract, yell bloody
10 murder. "Here we are, clean, good businessmen, and you give it
11 to old dirty down the street."

12 I mean, I don't want to do business with a polluter on the
13 Federal Government level. I think we all agree that that is a
14 desirable objective.

15 Senator Muskie. Yes. Were all these questions raised with
16 Cook's people? I guess I had this provision in one of my bills,
17 too, didn't I?

18 Mr. Royce. Yes, sir.

19 Senator Boggs. But maybe it is -- that's one possibility.

20 Mr. Jorling. By way of background, again, the Administra-
21 tion in several Departments is about ready to promulgate regula-
22 tions which will require a term in every contract executed by
23 that agency, a term requiring compliance with applicable air and
24 water pollution control standards.

25 Senator Muskie. What is the penalty for failure?

1 Mr. Jorling. It would be a term of contract standard pro-
2 curement law would apply. For remedy, whether it would be ---
3 Senator Boggs. Suspension or termination?

4 Mr. Jorling. It could be suspension, termination, it could
5 be assessment of a penalty, but it would be standard procurement
6 law would apply to interpreting what the remedy was for the viola-
7 tion of that term of the contract.

8 Senator Muskie. The trouble with that is that the Federal
9 Government may be more punished than the company.

10 Mr. Jorling. But there is discretion in procurement law
11 to, if a person is in violation of, say, the civil rights term
12 of the contract, normally the remedy is to withhold a portion
13 of the payment, or to sever the relationship altogether if it is
14 a nonessential service.

15 And I would suspect that that ---

16 Senator Muskie. Have you got that language in the civil
17 rights?

18 Mr. Jorling. I could pull that out quickly and we will do
19 so.

20 Senator Muskie. So what Tom is talking about is requiring
21 as a provision of Federal contracts hereafter that there be com-
22 pliance with pollution laws.

23 Senator Eagleton. Could we go at another? This is just
24 rank off the top of my head.

25 Say that with respect to Federal contractors, before a

1 contract can be signed by DOD or HUD or whoever, but say DOD, DOD
2 must get a certificate or some piece of paper from HEW, which
3 in essence says based on such information and/or such studies,
4 examinations, investigations and information," blah, blah, "as
5 we have, we have no knowledge as of the date this contract is
6 being signed that X Company is in violation of the Air Pollution
7 Law of 1970."

8 Senator Muskie. That's sticky, because unless in effect
9 that gives a blessing to the company, when no real evaluation of
10 its operations from environmental point of view has been made or
11 is in order, or would be justified. I mean, if no complaint has
12 been filed, you know, the company might be operating, no com-
13 pliance has been filed, nobody has focused on the emissions, and
14 so there is nothing on the record to indicate it is in violation,
15 but you are asking the environmental agency, without an examina-
16 tion that would justify an informed opinion, to give a certifi-
17 cate that would be interpreted as though the company were clean,
18 when it might not in fact be, even though its uncleanness isn't
19 visible.

20 Senator Eagleton. And if you had required the Government,
21 HEW, Middleton, to inspect every company that either as a con-
22 tractor or subcontractor had a Federal procurement contract, you
23 would have to have a mighty large number of inspectors. I agree.

24 My idea is silly.

25 Mr. Royce. Mr. Chairman, might I point up the parallel

1 might occur in air pollution with the mercury problem, in which
2 six month ago neither the Government nor industry nor any other,
3 the scientific community, was concerned with mercury effluents,
4 and now the Government has taken action against a great many com-
5 panies, on a post hoc basis, which should be done, in order to
6 abate mercury effluents, but ---

7 Senator Muskie. Do you put them on a blacklist at the same
8 time in terms of Government procurement?

9 Mr. Jordan. Well, that is covered by the adjective "know-
10 ing" in this language.

11 Mr. Jorling. Knowing conviction.

12 Mr. Jordan. Knowing violation. I don't think you could
13 include the mercury.

14 Senator Eagleton. Maybe the best therapy, Mr. Chairman, is
15 the court of public opinion.

16 Senator Muskie. But the certificate you are talking about
17 on page 35, still have the agency, the environmental agency
18 in the position of saying, "Well, we don't know of anything
19 wrong, so we are prepared to say they are all right."

20 That, even though we may know that it doesn't mean that, is
21 going to be taken as a whitewash of that company's environmental
22 record.

23 Senator Eagleton. I agree with you on that.

24 Senator Muskie. Without knowing what the hell the details
25 are.

1 Senator Eagleton. How about just the court of public opinion.
2 Let's assume there is no section at all called Federal Procure-
3 ment. Let's assume it is not in there at all. Again, I am just
4 groping around.

5 Senator Muskie. And there is a problem, because it was in
6 the bill I introduced, Senator Cook introduced it, and people are
7 going to say, "Why isn't it there now?"

8 Senator Eagleton. Well, if it weren't there, let's just
9 stumble through with me on the practicality of it. If it weren't
10 there, if nothing were there, and a charge were filed against
11 Company X, by the Air Commissioner of the region, saying, "You
12 are a big polluter," or if it were a tiny little contract, with
13 nuts and bolts, but would any kind of a meaningful contract, with
14 this being known, be effectuated or signed by DOD or whatever
15 agency with "an alleged notorious polluter"?

16 Senator Muskie. Well, I am sure that there are people,
17 because the people, including myself, have introduced bills, who
18 have wondered about the propriety of doing business with pollut-
19 ers and that will become increasingly visible, as an issue,
20 especially if we leave it out. Somebody is sure going to make it
21 an issue, and so I am afraid it is in the public arena, and we
22 can't avoid it.

23 But when you consider, you know, the thousands of contracts
24 that are entered into every week by some governmental agency, and
25 now do they all, or do all bidders on those contracts have to be

1 examined and certified for environmental purity?

2 Senator Boggs. It would be impossible.

3 Senator Muskie. It is quite a job.

4 Mr. Jorling. There is a possible fallback position in
5 avoiding the requirement of certification, and simply at this
6 point to paragraph (b) or (c), amending paragraph (a) to simply
7 require as a term of any contract and procurement, any such con-
8 tract, compliance with any applicable implementation plan,
9 including any emission requirement standard, or standard of per-
10 formance . . ."

11 Simply make this a term of Federal procurement contracting,
12 and allowing normal Board of Contract Appeals of each of the
13 agencies to make the judgment of what to do in the event such
14 term is violated, with respect to the relationship between the
15 Government and violator, whether it would be a penalty, whether
16 it would be withholding of funds, suspension of the contract
17 would be up to standard procurement law, but require as a term,
18 just a general term, like the civil rights term, compliance.

19 Senator Eagleton. Well, we ought to see what the standard
20 procurement law is.

21 Senator Muskie. How does that applicable statute apply?

22 Mr. Jorling. The procurement statute?

23 Senator Eagleton. Yes. You said standard procurement law.

24 Mr. Jorling. You mean procurement?

25 Senator Muskie. In the case of the civil rights.

1 Mr. Jorling. The Civil Rights Act screws simply require ---

2 Senator Muskie. Let's get that, and see if we can find a
3 pattern.

4 Senator Eagleton. If we can work it into a previously
5 existing pattern, then maybe we are out of the woods.

6 Senator Muskie. You may be able to dig it out while we go
7 over to vote.

8 Senator Cooper. There has been a discussion on the problem
9 of an emergency, and I know you have got a section here that
10 provides the Secretary of Defense exempt for one year, but what
11 if you had a condition which affected, say, the health and
12 security? This could affect the health, too, a violation, but
13 something in the same terms as the Taft-Hartley Act, the health,
14 the security, I believe it is.

15 Mr. Jordan. National emergency.

16 Senator Cooper. National emergency, where it would have to
17 be somebody else than the Secretary of Defense. The President
18 would have to certify it. You can do that in many kinds of
19 legislation. You could have a national ---

20 Senator Boggs. Instead of the Secretary of Defense, make
21 it overall, the President. That would cover anything.

22 Senator Cooper. Blackouts, emergencies.

23 Senator Muskie. I guess we had better go over and vote.
24 Can you all come back?

25 Senator Cooper. Yes, I can come back until 4:25.

1 Senator Muskie. That's good. I think we had better go vote
2 and come back.

3 (Whereupon, a brief recess was taken.)

4 Senator Muskie. May I ask Leon to report the discussions
5 he has had with Beryl Bernhardt on this approach? Beryl, as you
6 know, or may not know, has been with the Civil Rights Commission
7 for several years, and we thought his experience with this aspect
8 of the Civil Rights Law might be helpful.

9 I am afraid it isn't, very, but you might as well hear what
10 he had to say.

11 Mr. Billings. Well, the civil rights requirements contracts
12 contract compliance is first based on an interpretation of
13 Article V of the Constitution, later by Executive Order, and
14 finally Title VI and Title VII of the Civil Rights Act of 1964.
15 There hasn't been a great deal of prosecution under the provi-
16 sions of either or any of those.

17 Beryl remarked that in one case, President Kennedy had an
18 opportunity to require a plant to comply. He was told that the
19 plant would have to shut down, because it was operating in
20 Mississippi, and they dropped the issue. They had a limited
21 experience with one other company. No general enforcement history,
22 however, to give us any real guidance.

23 He did point out that the actions under a noncompliance
24 circumstance would be activated by a complaint, of which there
25 would be a Secretarial investigation and a Secretarial decision,

1 and that decision would be binding, on the basis that the courts
2 have held that dealing with the Federal Government is a matter
3 of privilege, not a matter of right. And they have held, also,
4 that the violator of the civil rights compliance requirements
5 could be debarred from entering into any Federal contract, so
6 long as the violation continues.

7 That's basically what I got from him.

8 Senator Eagleton. What's that last thing?

9 Mr. Billings. Could be debarred from entering into or con-
10 tinuing in any contract with the Federal Government, so long as
11 that violation continued, on the basis of an agency decision.

12 He said that these things have been appealed, but the courts
13 have held that because it is a matter of privilege, not a matter
14 of right, the agency is the one responsible for determining
15 whether or not there was compliance.

16 Senator Spong. What agency?

17 Mr. Billings. Of course there is no question as to whether
18 we can do this. At least, our discussion wasn't based upon any
19 other assumption. There is still the practical consideration of
20 how do you deal with these situations.

21 Have you found the language, Tom?

22 Mr. Jorling. The language on the civil rights clause does
23 not come directly out of the statute. It comes out of an Execu-
24 tive Order issued by the President, in which he sets forth as
25 follows: ". . . except in contracts exempted in accordance with

1 Section 204 of this Order, all Government contracting agencies
2 shall include in every Government contract hereinafter entered
3 into the following provision: 'During the performance of this
4 contract, the contractor agrees as follows: (1) The contractor
5 will not discriminate against any employee or applicant for
6 employment because of race, color, creed, "et cetera, and then
7 just proceeds by spelling out that order.

8 I have found others that might be more applicable, since
9 that has its origin more in the Constitution than in a statute.
10 There are several clauses required to be included in Federal pro-
11 curement contracts, that deal with such things as "Buy America,"
12 which refers to the supplies, et cetera, used in the contract,
13 Contract Works Hours Standards Act, which provides that a con-
14 tract term must be included in which the contractor -- there is
15 a term as follows, in the contract:

16 "This contract, to the extent that it is of the character
17 specified in the contract work hours standard" and then proceeds
18 to say that the contractor must provide laborers with a measure
19 of overtime pay as calculated by the Labor Department.

20 Another one is the Davis-Bacon requirements, which are also
21 labor requirements. The Copeland Act, which is another clause
22 that is a standard clause in contracts.

23 Senator Eagleton. Can I ask on those, Tom, or the Davis-
24 Bacon, and all of those others, my recollection of them though is
25 that the contract isn't cancelled. There are penalty provisions

1 set up under Davis-Bacon, if you are in violation, and money, you
2 are not paying the right wage, or what-have-you, the money is
3 set aside, but the contract goes on.

4 We are talking something, or we are alluding to something
5 far more severe. We are talking about, you just don't do busi-
6 ness any longer with this guy. Am I misstating it, Tom?

7 Mr. Jorling. No.

8 Mr. Royce. Also, the Davis-Bacon is a much simpler matter,
9 a matter of clear factual determination, once the Secretary of
10 Labor has determined the wage standards for that area, whether
11 or not the contractor is paying that, an infinitely less complex
12 issue than is being discussed here.

13 Mr. Jorling. Again, I don't know whether I would agree with
14 that, under the requirements that we are telling them that they
15 must comply with, by our implementation plan, emission require-
16 ments, emission plan, emission standards of performance. I think
17 those are easier to tell whether they are being complied with
18 than whether or not a person is having their civil rights violated,
19 or whether they are being paid a wage equal to their competence.

20 Senator Muskie. But in the case of the contract, the Davis-
21 Bacon, isn't that finding made in advance of the contract?

22 Mr. Royce. Yes, sir.

23 Mr. Guard. The Secretary of Labor establishes the prevail-
24 ing wages for the area, and then under that prevailing wage
25 scale the contractor must meet that scale, but the first deter-
mination

1 you are thinking of is made by a survey in the area, by the
2 Department of Labor.

3 Senator Muskie. You are talking about a lot that arises after
4 the contract has been entered into.

5 Senator Eagleton. But you get into factual disputes as to
6 prevailing wage. You get into factual disputes, whether a guy
7 who is banking on wood is a carpenter, or a carpenter's helper,
8 or a laborer, and if he is any one of the three, he is paid a
9 different prevailing wage, and of course the dispute is the con-
10 tractor says, "No, he is just a common laborer," whereas either
11 the guy or his business agent says, "Hell, no, he is a full-
12 fledged carpenter."

13 And that is where you get into your factual dilemma under
14 Davis-Bacon and other prevailing wage acts, but still you don't
15 cancel the contract though.

16 Mr. Jorling. There is an alternative solution, I think,
17 and that would be to simply spell out in our statute that the
18 President issue an Executive Order, or would cause to be issued
19 an Executive Order, which would establish procurement regulations
20 that would carry out the provisions of the Act, simply putting the
21 burden on the President's back, which he already has.

22 They have regulations drafted that will do this. But ---

23 Senator Muskie. With respect to this problem?

24 Mr. Jorling. Yes. And that would give him the ability to
25 issue an Executive Order like he did on the Civil Rights Act,

1 which spells out what happens in case of violation of that,
2 rather than have us try and write a complete statutory provision
3 dealing with eventualities in the case of violation.

4 Senator Eagleton. Pass the buck.

5 Senator Muskie. Well, can we get a look at the draft regu-
6 lations? You say they have got some drafted?

7 Mr. Jorling. I think he would have a great deal of diffi-
8 culty getting them out of the Department, but I do know they are
9 in existence, and that they are pending publication on some deci-
10 sions that are going on in the Council on Environmental Quality
11 in the White House, and the like. But I could try, but I just
12 don't know how successful I will be.

13 Senator Muskie. Well, that's an approach.

14 Mr. Jorling. There is a political reason there, I think,
15 if knowing that this was before us, we rejected it, that would
16 affect possibly their interpretation of whether they have authority
17 to do it. If we simply say that the President shall issue an
18 Executive Order to provide to carry out the purposes of this
19 Act through Federal procurement, then they would have the authority,
20 and they could go forward with regulation standards, Administra-
21 tive Procedures Act sense.

22 Senator Muskie. Is there a precedent for that kind of
23 statutory language?

24 Mr. Jorling. Pardon?

25 Senator Muskie. Is there a precedent for that kind of

1 statutory language?

2 Mr. Jorling. That I can't answer. I am not sure.

3 Senator Muskie. Well, I think why don't we ask the staff
4 to put that together, relying on precedent, if there is one.
5 Otherwise, drafting something that would accomplish that, and
6 let's take a look at it.

7 I think it is my present impression it is almost impossible
8 to write it out statutorily.

9 Mr. Royce. May I bring up one other observation, Mr. Chair-
10 man? Regarding the complexity of it, and a complaint may not
11 necessarily be as simple as it sometimes assumes.

12 We have seen under examination of this bill the NAPCA come
13 up with different tests for auto pollution, which show different
14 results in the absolute emissions themselves. And all of this
15 technology is in a rather germinal stage of development, in test-
16 ing and monitoring procedures, with many of these, and what
17 happens if, under ground rules established by one testing and
18 monitoring procedure, a company is clear, and then a new and
19 improved monitoring device becomes available, which would be the
20 basis for complaint?

21 And they might have entered into a contract in entirely
22 good faith, and be clean under one method of monitoring.

23 Senator Muskie. Well, of course that is a field where the
24 technology is so important a key, you are always going to face
25 that problem.

1 Mr. Royce. Yes, but you might not have such far-reaching
2 results as a three-year termination of contract, or something
3 of that sort.

4 Senator Muskie. Well, I think that three-year termination
5 is much too drastic.

6 Well, if there is no objection, members of the committee,
7 why don't we ask the staff to do that? I gather we are not pre-
8 pared to endorse what is before us. We don't have the new lan-
9 guage or alternative language available to consider.

10 The next subject that we have before is Title II. That is
11 page 36, and this has to do with the whole question of emissions
12 from moving sources of pollution, and this is a long section. It
13 goes beyond page 56.

14 Mr. Billings. It goes all the way through to Title III,
15 which is Noise.

16 Senator Muskie. All the way to 64. So we have got 28
17 pages here to digest.

18 Have members of the committee had a chance to? I assume
19 not.

20 Mr. Billings. I might point out, Mr. Chairman, that the
21 reason for the length is that it is an entire rewrite of Title
22 II of existing law. Because of the work that was being done on
23 it, we felt we had to rewrite the whole provision, and not just
24 amend it in part.

25 Senator Muskie. There is no way for us to identify the

1 new sections.

2 Mr. Billings. To the extent that it is possible, as we go
3 through, Mr. Chairman, the staff will try to identify them for
4 you. There are sections which are generally the same as they
5 were.

6 Senator Muskie. Well, what we have got to do is just read
7 this page by page, as we go along.

8 Mr. Billings. Yes, sir.

9 Senator Muskie. We are going to be a long time.

10 Now this title, then, in its present form, is the rewrite
11 of existing law, which includes automobile emissions, and what
12 else?

13 Mr. Billings. Aircraft, vessels. It goes back. It might
14 be easier to go back to definitions, page 62, "vessel, vessel
15 engines, aircraft, aircraft engines, vehicles, vehicle engines,
16 (applies to new vessels and aircraft)", et cetera.

17 Senator Muskie. I understand that, but that doesn't tell

18 On the books now are only new motor

19 Mr. Billings. On the books now are only new motor vehicles
20 and motor or vehicle engines.

21 Senator Muskie. Not just new, but all motor vehicles. The
22 present law isn't limited to new motor vehicles.

23 Mr. Billings. Yes, sir, standards for new cars.

24 Senator Muskie. Where is the existing law?

25 Senator Eagleton. Are we doing Venus or Jupiter?

1 Mr. Billings. Venus.

2 Senator Muskie. Well, I guess we are just going to have to
3 read this aloud, and take it up section by section.

4 Now this first section, 202, deals with what? All moving
5 vehicles, is that right?

6 Mr. Billings. Section 202(a) is relative to the establish-
7 ment of standards.. (c) and (d) are operating procedures in
8 existing law, so you need to read (a) and (e).

9 Senator Muskie. All right, well, let's read, Section 202:

10 "(a) The Secretary shall by regulation, after consulting
11 with appropriate advisory committees, prescribe, as soon as
12 practicable and in accordance with the provisions of this sec-
13 tion, standards applicable to the emission of all known substan-
14 ces of any kind or description from any class or classes of
15 (A) vessels, aircraft, commercial vehicles and new noncommercial
16 vehicles, and (B) vessel, commercial vehicle, and new non-
17 commercial-vehicle engines, manufactured for sale, sold, offered
18 for sale, introduced or delivered for introduction into commerce,
19 or imported into the United States for sale or resale, or operated
20 in commerce in the United States, which in his judgment cause
21 or contribute to, or are likely to cause or to contribute to,
22 air pollution. Such standards shall apply to such vessels, air-
23 craft, vehicles, or engines whether they are designed as complete
24 systems or incorporate other devices to prevent or control such
25 pollution; (b) in furtherance of achieving national ambient air

standards established under this Act, any standards for the control of emissions from vehicles and vehicle engines shall be based on the greatest degree of emission control from such vehicles and vehicle engines that is technically feasible without regard to the source of power or the propulsion system used therein on the date of enactment of this sentence. REgulations or standards issued by the Secretary under this title prior to the enactment of this sentence" -- you mean this section, don't you?

". . . this sentence shall continue in effect until revised by the Secretary consistent with the purposes of this title."

Now, this last subsection, which I have just read, makes it possible or gives the Secretary authority to, in effect, outlaw the internal combustion engine.

Mr. Billings. By giving the Secretary authority to prescribe a standard which could not be met by the internal combustion engine, it would, in effect, give him that authority, yes, sir. In other words, if it was technically feasible to design an engine system which could result in a pollution-free vehicle, he found that to be practicable, and promulgated it as a standard, and the internal combustion engine couldn't meet it, then the internal combustion engine would have to go by the board.

Senator Eagleton. You used the word "practicable." Is that the right word? Or "technically feasible." What is it? There is a difference.

1 Mr. Billings. Technically feasible. I am sorry.

2 Senator Spong. Well, I think practicable as far as the
3 time is concerned, but where is he reading from as far as tech-
4 nically feasible?

5 Senator Muskie. Page 37, six lines down.

6 Senator Spong. Right.

7 Senator Muskie. Does this subsection also mean that if a
8 prototype has been developed, that operates satisfactorily, does
9 that meet the test "technically feasible"?

10 Mr. Royce. Mr. Chairman, as a matter of information, which
11 may have some bearing on that question, the present Act includes
12 technically and economically feasible.

13 Senator Muskie. Yes.

14 Mr. Royce. And it may be that a prototype would be tech-
15 nically feasible, but it would require time to make it economic
16 and industrial adjustments to make such a prototype commercially
17 available.

18 Senator Muskie. Does subsection (b) give the Secretary any
19 authority that could not be read into Section 202 of the present
20 law?

21 Mr. Billings. Mr. Chairman, the Secretary has interpreted
22 202 of the existing law to limit him to prescribing standards
23 that can be -- that are "technically and economically feasible
24 when applied to the internal combustion engine."

25 Senator Muskie. Has he said that in so many words?

1 Mr. Billings. Yes, sir. He has not said that specifically,
2 no. He has said that in so many words, that their standards are
3 based -- the existing standards of a function of test, test is
4 a function of the ---

5 Senator Muskie. I understand, but the question I am asking
6 is whether or not he takes the position, or is even considering
7 the position, whether or not the present language permits him to,
8 in effect, substitute some other power source than the internal
9 combustion engine for the automobile.

10 I know that is the effect of the present standards.

11 Mr. Billings. In my conversations with the Administration,
12 my understanding is that they would not feel that they could do
13 that. Really, that they could base their standards on something
14 other than the internal combustion engine.

15 Senator Muskie. Well, there is a prototype. Does a proto-
16 type engine meet the test of technical feasibility?

17 Mr. Billings. It could.

18 Senator Muskie. Shouldn't it be clear? Shouldn't we -- you
19 say, "It could." Then should we make clear, then it should be
20 made clear, especially since the present language, by its terms
21 -- certainly I think by its terms it could be used to achieve
22 this result, it is not likely to be so interpreted by the Secre-
23 tary.

24 There is ambiguity in the present law. Then we ought to be
25 careful that we don't preserve a similar ambiguity in this new

1 statute.

2 Senator Eagleton. Leon?

3 Senator Muskie. Does technical feasibility, in other words,
4 require production line capability?

5 Senator Eagleton. That was going to be my question.

6 Mr. Billings. No, Mr. Chairman, I don't think so.

7 Senator Muskie. Should it?

8 Mr. Billings. Technical feasibility would require that it
9 can be done, doesn't make a valid judgment as to whether it
10 should be done, or whether it could be economically done. Whether
11 we wouldn't want to do it as a matter of public policy, just the
12 fact that it can be done from an engineering point of view.

13 Senator Muskie. Well, if it cost \$50,000 to build a proto-
14 type engine, does that price have anything to do with the cost of
15 technical feasibility?

16 Mr. Billings. I would suspect that that would have a great
17 limiting effect on the Secretary's using that as a base, but the
18 law would not stop him from using that as it is written here.

19 Senator Muskie. Of course, you could raise that to half a
20 million dollars per car. Is that technically feasible?

21 Mr. Billings. It is probably about what it costs to make a
22 prototype for the present certification under the existing law.

23 Senator Muskie. Well, if you don't have production line
24 capability, if that is not a question, then we don't know how the
25 individual automobile owner would be able to buy next year's car.

1 The production line capability is not part of the definition, or
2 shouldn't be.

3 Mr. Billings. I think the question is, Mr. Chairman, whether
4 or not the degree of control for motor vehicles is related to
5 the capability of achieving control from a technical sense, or
6 the necessity of achieving control from an air quality sense.
7 This is a very difficult thing to write into law.

8 Senator Muskie. No, I am talking about you have got to
9 be concerned about the words you are using. That at what point
10 is it our view -- and I realize this is a policy question also --
11 at what point should we require or should we make it possible,
12 let's put it that way, for the Secretary to shift, for the
13 country to shift, from the internal combustion engine to some
14 other power source?

15 The point at which a prototype engine, a prototype of a new
16 power source has been developed, wholly independent of any con-
17 sideration of its cost, or the potential for the motorist to buy
18 them, to get one, replace under this his old clunker?

19 Or do you have to be concerned about prototype capability?

20 Now this morning's newspaper carried the story of an amendment
21 that is going to be offered on the floor, which outlaws the
22 internal combustion engine after, what, 1975?

23 Senator Eagleton. Yes.

24 Mr. Royce. Mr. Chairman?

25 Senator Muskie. And that is independent of technical

1 feasibility in any sense.

2 Mr. Royce. The staff has given consideration to the bill
3 which you and Senator Magnuson introduced, which would provide
4 -- and also Section 211 in this -- which would provide for a fleet
5 purchased by the Government of new low-emission vehicles, and
6 this might be the place at which the Secretary could develop such
7 standards, because it has not only to do with the production costs,
8 but maintenance and operation of an engine, which in order to be
9 relevant to practice, would have to be tested on a fairly wide
10 basis.

11 Well, the issue here is to what extent should we try to
12 build into this legislation pressure upon the automobile companies
13 to develop new power sources? They certainly have no commitment
14 to that objective now.

15 There is almost no visible inclination on their part to seri-
16 ously pursue it. They are focussed entirely upon the internal
17 combustion engine, and their belief, whether real or not, that
18 it can be cleaned up sufficiently to meet all the air pollution
19 requirements that we might conceivably demand. That is their
20 present philosophy.

21 The question is, to what extent do we build this pressure
22 on them, since they haven't responded to the air pollution area
23 approach, in the '65 Act? So what extent should we impose legis-
24 lative pressure?

25 Senator Boggs. Mr. Chairman, are we spending \$20 million,

1 though, the Government, trying to find some other kind of engine
2 itself, isn't it, and spending \$20 or \$40 million for that?

3 Mr. Billings. They have announced this program. It hasn't
4 really gotten off the ground. They have spent about \$6 million,
5 I think, over the last few years, and planning to spend \$6 mil-
6 lion this year on it.

7 Another point I think might be ---

8 Senator Boggs. But they are asking for what, \$20 million?

9 Mr. Billings. I think the program announced by the Presi-
10 dent was a \$20 million program, but I can't recall. I think
11 that is a four- or five-year program.

12 Mr. Jorling. The broad outline of the program is to have
13 the technically feasible alternative by 1975, which will have sub-
14 stituted in the commercial market for the internal combustion
15 engine by 1980. That is the rough outline.

16 That's the goal, to have the technically feasible engine by
17 1975, the internal combustion engine substituted for in all new
18 cars, beginning 1980 and thereafter.

19 Senator Boggs. I thought that was pretty -- not that they
20 maybe shouldn't have pressure on them, but you thought that is
21 pressure on the combustion engine.

22 Senator Muskie. Well, this is a research objective. It
23 is not, as I understand it, a mandatory -- what is envisioned is
24 not a mandatory shift.

25 Senator Boggs. Right. No.

1 Senator Muskie. There is a difference between the two.

2 Mr. Royce. And their actual funding is still primarily on
3 improvement of the internal combustion engine.

4 Senator Muskie. The research program?

5 Mr. Royce. Yes, sir. I know of one instance of quite
6 a radically new departure in which they embraced it under nitrous
7 oxide controls. They asked for, they requested a proposal for
8 nitrous oxide controls rather than on the basis of a very radical
9 departure.

10 Mr. Billings. The staff had a meeting yesterday with
11 representatives of the automobile industry, not to discuss these
12 particular provisions, but to discuss in general questions of
13 warranty and fuel additives control, and several other things.
14 And in that discussion these points came out, and I think they
15 might be useful to the members:

16 1. The draft print that we were using had a statutory
17 requirement that a vehicle hold up to the emission control for
18 75,000 miles. I pointed out that the staff was considering
19 recommending 100,000 miles, because this was how long the car
20 stayed on the road, and this is how long they should theoretically
21 be paying whatever they were certified to.

22 This was sort of a shocking thing to the automobile indus-
23 try, and they said, "Do you mean this is with one catalytic muf-
24 fler, or two?" Because the best we have heard of is a 50,000
25 catalytic muffler. In other words, right today, in 1970, they

1 don't anticipate being able in 1975 to provide an automobile
2 which can meet the 1975 standards, which will last more than
3 50,000 miles without having to change catalytic muffler, which is
4 going to be a rather expensive device.

5 Secondly, they know they can't do it with the internal com-
6 bustion engine without removal of lead from gasoline. Now those
7 two things are for 'sure.

8 There is a question as to whether they will be able to meet
9 the 1980 standards, and as Mr. Royce points out, therefore, the
10 Administration is investing, the proposal is to invest a major
11 amount of this research into improving the internal combustion
12 engine so it can meet the 1980 standards.

13 If the committee goes to a point of requiring that cars
14 hold up for 100,000 miles, to meet individual car compliance with
15 the test, and production line testing and taking the lead out
16 and pushing the standards, the internal combustion engine is
17 basically out of it anyway.

18 I think these kinds of pressures may change, but I think in
19 the process, you have to build a different basis for standards.

20

21

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uns flg 1 Senator Muskie. Well, I understand, but what we have got
geo k 2 to decide first is our target. What do we want, and when?

3 We know we are going to have an amendment on the floor
4 that proposes, in effect, we eliminate the internal combustion
5 engine as a source of automotive power by 1975. Is that
6 the amendment?

7 Mr. Royce. It's, '76, isn't it?

8 Mr. Billings. I haven't read the amendment. The requirement
9 of the Environmental Action Proposal is that an engine which
10 could achieve the degree of control similar to the so-called
11 Rank heat cycle engine.

12 Senator Muskie. Which is clean.

13 Mr. Billings. Which is relatively clean -- compared to
14 anything that is in the foreseeable future, it is clean --
15 must be available by 1975. That would bar the internal combustion
16 engine, not the standards, if I understand it, past 1980, the
17 projected standards.

18 Mr. Jorling. Senator Nelson's amendment, however, did say
19 that any vehicle -- I have forgotten the exact wording, but
20 it prohibits the sale of any engine that is an internal combustion
21 engine for the use in automobiles after January 1, 1975.

22 Senator Boggs. Whether it is clean or not.

23 Mr. Jorling. Without respect to emission control. It is
24 just simply a blanket prohibition of this kind of engine
25 for this purpose, after that date. I would expect that there may

1 be alternative amendments offered, or at least talked about
2 being offered, with respect to at least statutorily limiting
3 horsepower or cubic inches, or somehow reducing the size
4 of internal combustion engines in a phase state.

5 This is another thing that the committee may have to consider
6 as it gets closer to floor action.

7 Mr. Billings. The 1975 deadline would impose on the
8 automobile industry approximately a three-year leadtime, between
9 date of enactment, if the bill was enacted this year, and the
10 1975 models. In other words, 1971 cars are basically on
11 the drawing board now, and 1975 cars coming out in '76, so
12 you are going to have three years.

13 Senator Cooper. May I ask a question here?

14 Senator Muskie. Yes.

15 Senator Cooper. Comparing this section to the old law,
16 Public Law 90-148, looking at section 231 it talks about
17 the substances, but this version says, "substances which in the..
18 judgment cause or contribute or are likely to cause or
19 contribute to air pollution."

20 Now, in the Act it said, "air pollution which endangers
21 the health and welfare of any person."

22 Is there a reason for leaving out "the health or welfare
23 of any person"?

24 Senator Boggs. The health is the key.

25 Senator Cooper. I think this is a much stricter standard.

1 It says, "Any kind of substance". Well, that is the Act,
2 the old Act. Now this says, "all known substances of any kind
3 or description which cause or contribute to air pollution."

4 Senator Boggs. Is that determined by the standards that
5 are fixed which fix certain, you know, types of air pollution?
6 The chief point is the other one seems to be limited to those
7 substances which cause air pollution which affect the health
8 and welfare. This is more comprehensive.

9 Senator Muskie. Well, I would guess that the language
10 before us, John, would -- I assume that air pollution means any
11 effects whatsoever, any deleterious effects of any kind.

12 Mr. Guard. Anything that is different from the air that
13 goes in, I suppose, water vapor, or any increase in temperature.

14 Senator Muskie. Do we have a definition of air pollution?

15 Senator Cooper. It would probably be that the air which
16 has been determined, that measure --

17 Senator Muskie. If you change the natural quality of the
18 air in any way, I suppose you would have pollution.

19 Mr. Royce. Right, but in all the rest, we have got
20 limited to public health and welfare, have we not? Deleterious
21 effects on public health.

22 Mr. Billings. Well, in effect, if there were to be a
23 change here the change should relate -- yes, that line is
24 left out.

25 Mr. Royce. We just dropped a line?

1 Senator Muskie. John, they dropped a line.

2 It was a typo.

3 Mr. Billings. The words "air pollution", the words
4 "which endangers the health or welfare of any person" appears
5 in the bill.

6 Thank you, Tom.

7 Senator Cooper. Yes.

8 Senator Eagleton. Mr. Chairman?

9 Senator Muskie. Tom?

10 Senator Eagleton. Most things, especially in drafting
11 laws, are susceptible to compromise.

12 Off the top of my head, again, I think this is almost an
13 either/or proposition. We leave it as written, Venus Draft 37,
14 then the laboratory example of technically feasible engines,
15 steam, atomic powered, or whatever. Fuel cells, that are
16 all technically feasible now, I take it -- I am not a
17 scientist, but they are all technically feasible.

18 Senator Muskie. Or the turbine.

19 Senator Eagleton. Then a vigorous strict constructionist
20 Secretary of HEW could outlaw under this language the internal
21 combustion engine tomorrow or six months from tomorrow or
22 whenever the effective date is. If you put in words after
23 "technically", "productionwise feasible", that is the other
24 extreme. My experience is nothing is ever productionwise
25 feasible. You know, it just ain't. And I just don't see, -- I

1 know, I think what we are striving toward is that over a period
2 of time the vigorous, alert, Secretary of HEW would nudge,
3 strongly nudge, the industry away from internal combustion
4 into utopian engines. Whatever they may be. He wouldn't do
5 it tomorrow; he would nudge them into it over two, three, four,
6 five, whatever year period of time, but I don't know how
7 the heck we write it that way.

8 Senator Muskie. The trouble is if you leave it this way --
9 you leave it this way then the technical feasibility obviously is
10 within the control of the industry more than anybody else.
11 And so the industry, by slowing down its research and dragging
12 its feet can delay the application of the Act to anything.

13 Senator Eagleton. I think of things that as we sit here
14 today are now technically feasible this minute.

15 Senator Muskie. Well, I don't know what is technically
16 feasible at this moment.

17 Mr. Billings. May I reference something else in here
18 that appears later on?

19 Senator Muskie. Oh, there is another question on technical
20 feasibility. By that, do you mean a power source that is
21 comparable in any degree with the convenience, performance
22 standards, and so on, of the present internal combustion engine?
23 What standard of performance must be technically feasible?
24 We don't have that in here at all. Something that will just
25 move?

1 Senator Eagleton. There is something that would say
2 certain things are technically feasible.

3 Senator Muskie. Well, for instance, you take the turbine
4 engine. We are always told that the turbine engine, you know,
5 is practically ready for buses -- except for developing
6 production line capability. In the aircraft industry, this is
7 a production line capability, but this is with respect to about
8 two or three thousand engines a year. If you are talking about
9 9 million engines a year, the turbine is a more precise piece of
10 hardware and so it would take some time -- this was in 1965
11 or 1966 -- to develop production line capability for turning
12 out 9 million engines a year.

13 Well, is that technically feasible for automobiles, if
14 you can't in fact produce them, for the number of cars that are
15 going to be demanded on the road by American motorists?

16 Mr. Billings. Mr. Chairman, when the staff were discussing
17 this, and trying to evaluate it, one point came up repeatedly
18 and that is, going back to this question of ambient air
19 quality, if the Act specifies, or if the Act required the
20 Secretary to come up with standards for motor vehicles which
21 met ambient air quality requirements; in other words, but for
22 the 1972 vehicles, so that by the time all cars on the road
23 were off, 1983, the ambient air quality would be protective
24 of the public health, insofar as automobile emissions go and
25 then you required that those standards be imposed at a certain

time, you would then place the burden on the automobile industry to develop the technology to meet those standards. It is a little bit risky if they can't do it but that is one way of relating this program to Title I, placing this, in other words, not having the standards related to technical or economic feasibility at all but what has to be done to automobiles to get their emissions down to a point where they don't degrade air quality.

Senator Muskie. Well, you are assuming now that we are going to adopt a national ambient air standards approach.

Mr. Billings. Well, in any event, regardless of what approach you take, talking about an ambient air quality protective of public health in any given area, you would obviously have to design for the worst region, if you wanted to go to the regional approach, but the standards that no motor vehicle could be produced after such and such a date that did not meet an emission level which was protective, which in an agglomerate would be protective of the public health.

Senator Muskie. Well, what you are talking about is emissions from automobiles in combination with emissions for other sources. Well, how do you write a national law that is geared to this? Combined with other sources in what city?

Senator Spong. What other sources?

Senator Muskie. The worst city?

Mr. Billings. Yes. That is the only way.

1 Mr. Royce. Under Federal preemption of the auto
2 provisions in the 1965 Act, it would have to be designed.

3 Senator Muskie. I don't know how you do the approach.

4 Senator Boggs. On what day?

5 Senator Muskie. Is there a standard accepted by the
6 agency now for what they would regard as a clean engine? What
7 would they regard as a clean internal combustion engine, in terms
8 of emissions of the various pollutants and engines?

9 Mr. Grundy. They have proposed a standard for 1980
10 which we feel would be the most desirable base, and have also
11 said that it can't be achieved with the internal combustion
12 engine.

13 Mr. Billings. Do you know what it is?

14 Mr. Grundy. I have it upstairs.

15 Senator Muskie. They say it can't?

16 Mr. Grundy. I think it can't be achieved with the internal
17 combustion engine, as they envision it, even with major
18 modifications.

19 Mr. Billings. The question is, then, why wait until 1980,
20 and have 10 more years of cars on the road which can't meet
21 the standards?

22 Senator Boggs. Why build all those highways?

23 Senator Muskie. Yes.

24 Well, then, another way of doing it would be to write
25 those standards into the Act, with the date.

1 Mr. Jorling. It is a rephrasing, basically, of the Nelson
2 Amendment.

3 Senator Muskie. Yes.

4 Mr. Jorling. Because the effect is identical.

5 Mr. Brayman. Except that there is the latitude that
6 you could make an internal combustion engine clean.

7 Mr. Billings. This, then, would become a performance
8 standard. You wouldn't tell them how they do it. You would
9 simply say whatever it is.

10 Senator Muskie. And then challenge them to meet it.

11 Senator Boggs. What did we do with the detergents, you
12 know, in the water bill, with all the soapsuds? Didn't we
13 set up a commission where year after year they had to meet
14 and see --

15 Senator Muskie. No, we tried to but that was dropped. The
16 House wouldn't go along with it.

17 Mr. Royce. They did it voluntarily.

18 Senator Boggs. Yes, but wasn't that a good approach to the
19 thing for two or three years, to see where we were going
20 and how we could get with this thing?

21 Mr. Billings. That is right, but the automobile industry
22 has wasted a lot of time.

23 Mr. Royce. If the committee were to write 1980 on
24 standards into the Act, it would certainly have the merit
25 of giving notice not only to the auto industry but also to the

1 oil industry, which is going to have to make some major
2 readjustments.

3 Mr. Billings. Are you talking about a 1980 standard in
4 1980?

5 Mr. Royce. Yes.

6 Mr. Billings. That is a long time.

7 On that basis, that means 1990 before you get any ambient
8 air quality that is protective of public health in most major
9 cities of the United States from carbon monoxide, according
10 to the information.

11 Mr. Jorling. Not only for carbon monoxide but for the
12 three pollutants which automobiles contribute. If you don't
13 achieve the 1980 standard until 1980, because of the replacement
14 factor, it will be at least 1990 and probably after that because
15 they don't know how long these devices will work, mileage or
16 time-wise. It will be at least after 1990 before you achieve
17 ambient health, or ambient standards protective of health in
18 the major cities. The major cities here go down pretty small.

19 Mr. Grundy. Somewhere along here, we are going to have
20 to approach the used car and I asked the auto industry yesterday
21 as to what they could do with a pre-1966 vehicle. Both General
22 Motors and Ford have a retrofit kit that will halve the
23 emissions upon pre-1966 vehicles.

24 Senator Muskie. How much?

25 Mr. Grundy. It would cut it. They said under a hundred dollars.

1 Mr. Billings. It would cut it in half, but the main
2 problem with that is that this is basically the same thing
3 they did with the post-1966 vehicles, and those have failed
4 80 percent of the time. The automobile industry is not to be
5 trusted on this score, because they are not going to give you
6 any information that applies practically.

7 Mr. Grundy. The way we are approaching this now is we
8 are continuing to put the burden on the new vehicle, and if we
9 are going to improve the air pollution out of doors in a hurry
10 we could make a significant step by also going after the
11 used vehicles.

12 Senator Muskie. It seems to me that the pressure point in
13 the case of used vehicles is different than the pressure point
14 on new vehicles. The pressure point in the case of used vehicles
15 is on local government, frankly, in my judgment. The extent to
16 which they are going to permit the use of these vehicles and
17 the standards that would be applied to restrict that use
18 or force people who want to operate them to comply with
19 standards.

20 I think you have got a little difference, more flexible,
21 but on used cars, frankly, I think we have got to find -- what
22 is this? When the numbers are too small for me to read even
23 with my glasses, I am in tough shape.

24 Mr. Billings. Two parts per million hydrocarbons, .2
25 percent by volume, carbon monoxide, 100 parts per million nitrous

1 oxides, .03 grams per mile particulates, and questionmark
2 of ~~outward~~ losses.

3 Senator Muskie. What do these figures represent, an
4 emission-free or a pollution-free vehicle?

5 Mr. Billings. Relatively. That is compared to what was
6 pre-1966.

7 Senator Muskie. Relative to what?

8 Mr. Billings. Pre-1966.

9 Senator Muskie. Well, I don't want comparisons. I want to
10 know what, if anything, this represents in absolute terms. Is
11 this just another bunch of figures grabbed out of the bag
12 by somebody or does this represent somebody's evaluation on
13 some basis of what a clean internal combustion engine would
14 represent?

15 Mr. Billings. It is more, I think, than in Detroit,
16 in the 1967 hearings when figures similar to this were discussed
17 by the industry it is what they would think a clean internal
18 combustion engine is.

19 Senator Muskie. These are different figures than they
20 had?

21 Mr. Billings. They are substantially the same; they
22 said 25 to 50 parts per million would be clean.

23 Senator Muskie. But what they were talking about is
24 returning the quality of the ambient air to its condition in
25 1940. Now that is a real --

1 Senator Boggs. This applies to the diesel engines as
2 well as the gasoline burning engines, does it not? This whole
3 business?

4 Mr. Billings. Diesel engines are much, much cleaner.

5 Senator Boggs. I know, but I mean what we are talking
6 about is diesel engines, too, right? Not just the gasoline
7 burning engines.

8 Mr. Billings. They have a different set of standards for
9 trucks. They were first effective in 1970.

10 Senator Muskie. This language that is before us covers
11 both used and new.

12 Mr. Billings. Yes. Well, we have in this the language
13 for developing used vehicle controls.

14 Senator Muskie. But when you say the same standards
15 applicable to the emission of all known substance of any
16 kind or description from any class of vehicles, aircraft,
17 commercial vehicles, or new non-commercial vehicles --

18 Mr. Billings. The proposal was to cover all commercial
19 vehicles, new and used. This way you would be able to get
20 the fleet operations whereas with individual ownership vehicles
21 it would be very difficult to require the retrofitting on
22 used vehicles, and then we went back here into --

23 Senator Muskie. All right. Well, all right, let's get back
24 to the new car. Well, what is -- I don't sense any real
25 driving thrust.

1 Senator Spong. You have the sympathy over here,
2 Mr. Chairman.

3 Senator Eagleton. We are hand-wringing amongst ourselves.

4 Senator Muskie. Well, how would you react to the deadline?

5 Senator Eagleton. Let me give you this scenario. Suppose
6 you have the deadline that Leon was talking about, you know,
7 an 11-year deadline. I guess that is the cycle by which all
8 cars are in the graveyard, and all new ones, 11 years, to
9 expurgate them. That is 1981. The first criticism you hear
10 will be, "Well, soft on cars, more stinking years of New
11 York cities, Tokyos, Romes." That is the first superficial
12 gripe.

13 The second thing is, you get to about year 8 or 9, and
14 in my judgment not much will have been done the first seven or
15 eight years.

16 Senator Spong. And then "My car is my castle,"

17 Senator Eagleton. Precisely. The gun control lobby will
18 then become this; it will say, and the ads will be on the
19 radio, "Driver, beware, the Federal Government is about to
20 take your car away from you," and you get everybody -- not just
21 the nuts, you will get everybody in the country writing letters
22 saying, "My car is my castle. And that is all I have got
23 in life is my car, and you are going to take this away from me,
24 and I am going to get a pogostick," or something, and then you are
25 going to have exemptions, where new cars -- Spong and I are

1 non-leased new cars.

2 Senator Spong. That is right.

3 Senator Eagleton. We can drive around, but some poor slob,
4 probably in this instance a black man, can't drive into downtown
5 New York or downtown Chicago to work at the steel mills and he
6 has got eight kids, and he says, "Well, what the hell kind of
7 country is this?"

8 Boy, I don't know whether I am dreaming up opium dreams
9 or not, but you turn loose, none of this --

10 Senator Muskie. There is one other point. With that
11 kind of a deadline, what is going to happen to the value of
12 used cars? It is going to immediately depreciate the value
13 of everybody's automobile. Not so much today but five years
14 from now. You would begin to feel the effect.

15 Mr. Billings. I don't think that the deadline has to
16 apply to vehicles that are on the road, however. If the
17 deadline applies to the introduction of a clean vehicle, all
18 models, all cars sold in X year, then you are not going to have
19 this circumstance, because it will just mean, well, if you
20 introduce this deadline in 1975 in 1986 you are going to
21 have all cars on the road clean. Essentially, 11 years,
22 110 million vehicles, 150 million vehicles. You would be doing
23 this on a natural evolution pattern. You would still have
24 to have if you went to some, retained an air quality standards
25 concept, some kind of regional approach to protect health in

1 downtown New York City before 1986, then they will probably
2 have to ban cars from there for other reasons, anyway.

3 Senator Muskie. You are talking about 11 years. Now,
4 how about this Nelson bill, 1975?

5 Mr. Billings. This still would take 11 years. That is
6 my point. That is whatever year you set, it will not have resulted
7 in a reduction of air pollution to levels protective to public
8 health.

9 Senator Muskie. I am not talking about that, now. I am
10 talking about whether we are going to buy the idea of prohibiting
11 the manufacture of any engines after 1975.

12 Senator Spong. That will enhance the value of used cars.

13 Senator Muskie. As antiques, you mean.

14 Senator Spong. Certainly. I would assume they can go
15 as long as they can pass inspection or just be against the
16 manufacturer --

17 Senator Muskie. That will probably stretch out their
18 use; that is right.

19 Mr. Jorling. The language of the Nelson bill is as
20 follows: Its reference to 3229, it is to insert a new paragraph
21 6, "for any new motor vehicle propelled by an internal combustion
22 engine to be sold within or brought into any State after
23 January 1, 1975."

24 Mr. Billings. So much for used cars. Wow!

25 Mr. Jorling. "Any new motor vehicle," it would provide.

1 I think one of the elements that must enter the discussion
2 somewhere is, I think, by the very fact that the manufacturers
3 continue to bring out new models of automobiles indicates
4 that they still have tremendous resources to make capital
5 investment changes in their vehicles. If the suggestion is
6 made that by 1975 a proposed 1980 standard is enacted,
7 we could, giving some or having some element of faith in the
8 enterprise system, assume that we probably would have a lot
9 fewer new models of cars in 1975 and that the industry would
10 have responded to such by redirecting their resources and
11 their research and development into a single automobile that
12 would meet that requirement. Now, whether the corporation could
13 do that is something that is a matter of judgment. But if they
14 bring out, like Chevrolet does, 27 or 30 different models of
15 automobiles each year how many clean models of automobiles could
16 they bring out if they didn't bring out but one? Or if they
17 didn't bring out 27 and devoted all of the resources that they
18 had used for 27 could they achieve a clean automobile in 1975?

19 Senator Eagleton. Are you tying that in with your
20 earlier suggestion of horsepower limitation and cubic inch
21 limitation, et cetera?

22 Mr. Jorling. This is another alternative. I think we could
23 achieve great reductions by limitations of horsepower and cubic
24 inches, almost overnight, and, also, weight. A 2,000 pound
25 automobile is sufficient, and yet we are building 4500 and 5,000.

1 Senator Spong. What do you have in Tokyo?

2 Mr. Jorling. It is numbers.

3 Senator Spong. Numbers?

4 Mr. Jorling. And that is a problem we are always going
5 to face in our most dense population centers, is restriction
6 of the use of automobiles completely. But total emissions,
7 across the country, could be significantly reduced by just
8 limiting horsepower.

9 Mr. Royce. Toyota was the first foreign car to achieve
10 compliance with U.S. standards.

11 Mr. Chairman, could I make one suggestion, perhaps in
12 the use of the term "internal combustion engine, perhaps
13 the need for qualification, in that theoretically a hydrogen-
14 oxygen engine is technically feasible. Such an engine has
15 been developed in NASA. It is an internal combustion engine
16 and its only emission was water vapor and carbon dioxide, and
17 this may be or some variant of this may be the route toward
18 emission-free engines in terms of health and public welfare.
19 But it is still an internal combustion engine, so it might be
20 advisable to in this refer instead of just broadly internal
21 combustion engine, the "current conventional gasoline internal
22 combustion engine."

23 Senator Boggs. And you are referring strictly to just
24 gasoline engines, not diesels and trucks?

25 Mr. Billings. The fact is if they converted to a diesel,

1 which they could do now directly, they could reduce automobile
2 emissions radically, but it would be the availability of the
3 fuel not the availability of technology, not the availability
4 of the technical ability to design the engine, and not the
5 availability of production to build the engines. In fact, there
6 are motors on the road today with these engines; they just don't
7 climb hills as fast..

8 Senator Muskie. Let's look at the technical feasibility,
9 too. Supposing we adopt this approach, and force the
10 company, say, to rush pellmell into, you know, some larger
11 equivalent of the golfcart.

12 Mr. Royce. Don't knock it; it is a big thing in St.
13 Petersburg, Florida.

14 Senator Muskie. And in 1975 we have got 76 million of
15 them on the road. Where are you going to get them charged up?
16 Where are they going to get power?

17 Well, that is just a slight, little detail. I mean,
18 there is technical feasibility required, that you have fuel
19 available to power these things.

20 Mr. Grundy. Some raised the question of controlling
21 combustion rates, which is very much a way --

22 Senator Muskie. What?

23 Mr. Grundy. Combustion rate, sir, and it is one of
24 the most direct approaches to controlling emissions that is
25 available. If you reduce the compression ratio you can

1 make it easier to achieve the proposed 1980 standards. It has
2 been suggested by some people that we give the Secretary such
3 authority, that this being one of the alternatives he should
4 have authority to require lower compression ratios. There is
5 already developing another horsepower race between the fuel
6 industry and the automobile industry, where the auto industry
7 has said, "We will lower our compression ratios in order to allow
8 the industry to meet the 1975 standards." But, in turn, they have
9 asked the industry, "How long will it be before we can start
10 up again on the compression ratio?" So that this horsepower
11 compression ratio relationship is the one that the two industries
12 have been pushing each other on for many years. And it is one
13 of the reasons why we are having trouble meeting emission
14 standards, and there is a relationship, as I mentioned; I think
15 we should consider giving the Secretary authority to control
16 compression ratio, or limit it.

17 Mr. Brayman. Could I say something, Mr. Chairman?

18 Senator Muskie. Yes.

19 Mr. Brayman. It would seem to me that to an extent, we
20 are going about it the wrong way, when we talk about limiting
21 compression ratios or horsepower. I would think the main
22 thing is, you would want to limit what is coming out of the
23 tailpipe. If somebody wants to spend \$20,000 to get a 500 horse-
24 power engine on which he has got a thousand dollar control device,
25 and it still puts out no more pollution than a Volkswagen with a

1 \$20 device, I would think he should have that right. I would
2 think that if we can limit it to the tailpipe, talking about
3 what is coming out of the tailpipe, that you can give
4 Detroit its head, and give the oil industry its head, to go and
5 maybe each company come up with a different answer, but
6 they have got to have something in 1975 or 1978 or whatever
7 date, that achieves it, or they don't market a car. And I would
8 assume if you tell them you have got to meet a legislative
9 standard that they would do it.

10 Senator Muskie. So you are arguing in favor of the small
11 print that I had here awhile ago.

12 Mr. Brayman. The 1980 figures, or some such similar
13 thing, in the law.

14 Mr. Jorling. There are some other aspects to this,
15 though, if we think ecologically like you did by suggesting
16 that you have got to consider if you use an electric engine
17 or an electric fuel cell, or something, where you are going to
18 find that power source, and what the effect of that would be.
19 If you reduce compression ratios, horsepower, you do achieve
20 other social benefits besides reduced emissions, and that
21 would be safety. The insurance industries now do not insure
22 some vehicles with certain high horsepower engines. There is
23 a very close relationship between high horsepower and death
24 rates; so that that is another aspect to be considered.

25 There is another one that I think, at the risk of being

1 a little bit far out, the best evidence now that the National
2 Academy of Science has released is that there are about
3 80 years of petroleum left on a worldwide basis; that is all
4 the petroleum reserves that are in the world, and, also, there
5 is an anticipation, these anticipated to be discovered. There
6 is 80 years. If you go to a catalytic muffler approach on
7 vehicles, you increase fuel consumption for the same engine
8 about six to eight to ten percent which would have a great
9 effect on the fuel reserves.

10 We also have increased jet fuel consumption, which also
11 is markedly reducing that fuel reserve so that this is something
12 I think that bears on the question of whether we permit gasoline
13 powered engines to proliferate.

14 Senator Muskie. What we ought to do is increase the size
15 of internal combustion engines so we will run through those
16 reserves faster and by 1990 we may not have the fuel for
17 the internal combustion engines.

18 Mr. Guard. Mr. Chairman, as I remember the National
19 Safety Administration figures, the highest accident rate was
20 with Volkswagens. I don't know if it has anything to do with
21 the power or fuel consumption.

22 Senator Muskie. They are just more vulnerable; with the
23 big clunkers around, they knock them off.

24 Senator Boggs. They go so fast, too. They travel faster.

25 Senator Muskie. Well, what do you think? Which of these

1 ideas should we try to polish up?

2 I adhere very strongly to a guideline here of some kind,
3 because I just don't trust this industry to exert the effort
4 that they ought to be exerting, that needs to be exerted.

5 The difficulty, of course, is to pick it, and to do it
6 in a way that relates to all of the side effects of such a policy.

7 Senator Eagleton. Or do you try to pursue both? That
8 is, do you try to scale down the evil effect of the present
9 engine because of the horsepower race, the Joxling idea, and
10 Bill and Dick, and tomorrow if you cut in half all the horsepower
11 in the country, I read somewhere that that would cut half the
12 pollution in cities by automobiles, non-stationary. So you would
13 pursue that avenue for the immediate sort of crisis type
14 approach, and then another avenue for a decade from now, or 20
15 years from now, where we have no internal combustion engine, I don't
16 know, do you pursue both, immediate, and long-range?

17 Senator Muskie. What horsepower ceiling is realistic in
18 terms of --

19 Senator Eagleton. I had a 96-horsepower Falcon, in 1961.
20 Couldn't use airconditioning on it because it wouldn't carry
21 it -- wouldn't hardly carry the body. But it ran. You know.

22 Senator Muskie. Well, horsepower, of course, represents --
23 airconditioning is one. This is one way people have to escape
24 the pollution on the highways. You take that out of their
25 reach.

1 Mr. Royce. The horsepower ratio is rated very differently,
2 depending on the kind of engine, too. Perhaps that would
3 not be as functional as displacement and compression ratios.

4 But one thing, also, Mr. Chairman, I think should be
5 kept in mind, regarding a deadline and as Leon has indicated
6 if we set it in 1975, 1986 would be the time when all the
7 cars would have met that compliance. In terms of the critical
8 episodes, and the cities that are most bedeviled by pollution,
9 there are still other avenues for them to exercise control
10 of auto pollution in terms, as you earlier discussed, of
11 requiring retrofitting or requiring control of the use of
12 their autos, and as has been brought up before the Subcommittee
13 on other occasions certainly Manhattan is going to have to
14 require some control for reasons other than pollution. So will
15 some other cities. So that the committee doesn't have to solve
16 all of the urban pollution problems and we don't have to
17 assume that they will remain unsolved until 1986. There are
18 still many --

19 Senator Muskie. That line of reasoning is all right on
20 used cars but it isn't on new. Dammit, every new car we
21 release to the public, you know, every car, that just continues
22 a pollution problem of some degree. Dammit, how many new cars
23 have been manufactured under the 1965 law, with supposed
24 pollution devices? Twenty-four million?

25 Mr. Grundy. Ten million a year.

1 Senator Muskie. Thirty million of them, and to what
2 degree did they perform better from the pollution standpoint
3 than the previous 30 million?

4 Mr. Billings. Two-thirds of them.

5 Senator Muskie. We don't have any evaluation, but I
6 suspect there is very little difference.

7 Mr. Royce. Many of them were worse because they were
8 higher powered than the older cars.

9 Senator Muskie. Yes. So that under that Act we produced
10 30 million more new cars and the Act's objective was cleaner
11 cars and yet I think the net result of the total production
12 was very little improvement.

13 Mr. Billings. Statistically those cars were supposed
14 to have reduced emissions by 80 percent and in fact
15 insofar as they have been tested to date they have netted
16 probably 50 percent and their compliance is going down as they
17 get older so one can reasonably assume if there is any
18 relationship to the initial observations and a hundred thousand
19 miles, a car that is 10 years old is going to be virtually
20 the same as an uncontrolled vehicle of pre-1966 model, pre-
21 1968.

22 Senator Muskie. We put those on the road. Assuming, you
23 know, that we were achieving an object.

24 Mr. Billings. At a price of approximately \$25 to \$50 per
25 consumer, per car, and maybe some loss.

1 Senator Boggs. If we just set the standards that we want
2 or would expect, by a certain year, by '75, or '76, or '78,
3 and leave it there.

4 Senator Muskie. What you are talking about is reductions
5 to specific standards.

6 Like in the fine print I couldn't read.

7 Senator Eagleton. Or tailpipe? Are you talking in a
8 region or are you talking per car off the assembly line?

9 Senator Boggs. Per car.

10 Senator Muskie. I think you have to have per car.

11 Senator Boggs. I do, too.

12 Senator Eagleton. If so, how long does it have to meet
13 that standard? A gadget that will keep it pretty clean for
14 three or four months, versus one that is going to keep it
15 pretty clean for a year?

16 Senator Boggs. Just like you do now on safety; you have
17 got to have these tested once a year, or every six months and
18 put new equipment on them just the same as you would new
19 brake linings every so often -- it would seem to me if you want
20 to do that. I don't know how else you can get at it.

21 Senator Spong. How many States have mandatory inspection,
22 Caleb?

23 Senator Boggs. I don't know, but I think most of them do
24 We have had it for a good number of years.

25 M^{rs}. Meyer. The problem with the Highway Safety Act is that

1 there is a strong resistance among a number of States to
2 periodic motor inspection. I think two outstanding examples
3 are California and Maryland. California will only go for
4 random inspection and Maryland has registration, the only thing
5 is the changeover, change of licensing on a used car.

6 Senator Muskie. Well, let me try out an idea on you fellows.
7 We might as well get a rise out of you, and crystalize something.

8 Why don't we ask the staff to put together a proposal here
9 that would set the 1975 model year. Is that what you are talking
10 about?

11 Mr. Royce. Yes, sir.

12 Senator Muskie. Or the 1976 model year.

13 Mr. Grundy. '75, cars on sale in the latter part of '74.

14 Senator Muskie. Well, the model year starts in September
15 or October. So you are talking about the September-October
16 1974 model year.

17 Require that they meet the standards that are in effect,
18 the 1980 standards.

19 Mr. Guard. I understand, Mr. Chairman, that there are
20 no devices now that meet the proposed 1975 standards.

21 Senator Muskie. I understand.

22 Mr. Guard. Which are, or will be double in 1980.

23 Senator Muskie. Well, those standards are worked out,
24 as I understand it, with consultation with the industry, so
25 they reflect a pretty heavy industry input. That is what I am

1 suspicious about, on the basis of the record. And I think
2 you have to bring pressure on them.

3 Now, if they want to meet these standards with internal
4 combustion engines or some other power source, that is an
5 option that would be open to them, the idea being that you would
6 not come out with anything like this, probably, in conference,
7 but it would give us a good strong position to go to the floor
8 with.

9 Senator Eagleton. That is a tailpipe standard, per car?

10 Senator Muskie. I gather we want the authority to cover
11 the other sources of emission from the automobile, the carburetor,
12 and the crankcases. I assume both of those are now under
13 control, aren't they?

14 Mr. Billings. These are the gross vehicle emissions.

15 Senator Muskie. These are gross vehicle emissions, not
16 just the tailpipe. There would be emissions from the individual
17 automobile.

18 Mr. Jordan. What would you see happening in conference,
19 Mr. Chairman?

20 Senator Muskie. I don't know.

21 Senator Eagleton. I didn't hear the question.

22 Senator Muskie. We would have a hell of a job selling
23 this.

24 Mr. Jordan. We would have to compromise in one of two ways
25 in the conference, sir; we would either have to tamper with the

1 figures, with the standards themselves, over the year, or we
2 would abandon the provision altogether.

3 Senator Muskie. Well, Dick says that he thinks '77 is a
4 doable year.

5 Mr. Billings. That would be a five-year leadtime, with
6 advantage.

7 Mr. Royce. If we came out of conference with '77.

8 Senator Eagleton. And how long does the new car, the '77
9 car, using that year, it comes off the line, it is tested and
10 it meets Standard X Clean -- you know, clean as whatever that
11 standard says -- how long does it have to stay that clean? Six
12 months?

13 Mr. Billings. One hundred thousand miles.

14 Senator Muskie. We have got the warranty provisions in here
15 that would cover it.

16 Senator Eagleton. And it is checked annually by each
17 State, a la safety inspection in Delaware?

18 Senator Muskie. Cover these points.

19 Mr. Billings. Let me go over this. Included in this
20 would be, one, I assume, the production line testing of motor
21 vehicles.

22 Senator Muskie. Yes.

23 Mr. Billings. Two, the establishment of safety inspection
24 programs to assure compliance with warranty, over whatever period
25 of time the committee would decide on.

1 Senator Muskie. Yes.

2 Mr. Billings. Three, requirement that the emission system
3 meet the standards for the life of the vehicle which the
4 Congress would arbitrarily set at, say, a hundred thousand miles
5 or 10 years.

6 Senator Muskie. All right. Write that in. Get the whole
7 thing.

8 Mr. Billings. I would assume that the committee would
9 want to have something to do, to regulate fuel additives.

10 Mr. Grundy. Well, could I ask a question in that regard?

11 Senator Muskie. Yes.

12 Mr. Grundy. If the industry is unable to meet these
13 standards, do we wish to give the Secretary sufficient authority
14 to achieve these objectives by, one, regulation of fuels,
15 two, controlling of compression ratios and maybe, three, control
16 of horsepower?

17 Or displacement?

18 Senator Muskie. No, this approach, to the point that
19 the industry knows better how to adjust the technology to meet
20 the standards, I think that if you give them a deadline then
21 you are putting pressure on the ingenuity of the industry.
22 If you don't have a deadline, then there might be some sense
23 to making the Secretary an automotive expert and let him adjust
24 all these technical factors, but it seems to me with a deadline
25 the advantage of that is that you then call upon the industry to

1 exercise its ingenuity to achieve the results. We could say
2 in the report that obviously, control points are horsepower,
3 compression ratios, and all the rest of it, of which they are
4 very well aware anyway. But it doesn't seem to me that if you
5 set a deadline that we should then put the burden on the
6 Secretary or some part of the burden on the Secretary to develop
7 the technology to meet the deadline that the statute imposes.
8 That burden ought to be on the industry.

9 Mr. Grundy. Well, the auto industry may take the position
10 that they are now, that unless lead is taken out of the
11 gasoline they can't achieve it. Do we want to give the
12 Secretary sufficient authority to take the lead out?

13 Senator Muskie. That is another point.

14 Mr. Billings. Let me finish this checklist, if I might.

15 I assume that another tool would be recall authority,
16 if the cars failed to meet the warranty provisions. Would
17 the committee want to retain the existing preemption provisions,
18 so that the automobile industry would only have to meet one
19 set of standards when they did meet that deadline? I assume,
20 of course, a so-called clean car, there wouldn't be any
21 need to allow the States to do anything more.

22 Senator Muskie. Well, some of them might argue that for
23 those five years they would have the right.

24 Mr. Billings. We have proposed language in the draft
25 which would give the Secretary authority to waive preemption,

1 where a State can demonstrate that it was essential.

2 Senator Muskie. Why don't we try that approach?

3 Mr. Billings. All right. Then the question would go to
4 the one that Dick was just raising, relative to the authority
5 for the Secretary to regulate fuel additives and fuel components,
6 both for the protection of public health and welfare as well
7 as for effect of implementation of the statutory deadline.

8 Senator Muskie. Well, given that authority there is a tool
9 to meet the 1975 deadline.

10 Mr. Billings. Three, well, finally, should the statute
11 contain authority for prototype purchases of vehicles and so
12 on, to stimulate the development of the technology that the
13 statutory deadline would require?

14 In other words, the question is, should the Federal Govern-
15 ment enhance the competition to the automobile industry in
16 developing the vehicles?

17 Senator Muskie. You are talking about the legislation
18 that is before Magnuson's committee?

19 Mr. Billings. Well, it would be that plus the legislation
20 that has already passed Magnuson's committee; whether or not
21 the Conference Committee would agree, we want to incorporate
22 procurement features in this legislation?

23 Senator Muskie. What would be the purpose?

24 Mr. Billings. To stimulate the development of low
25 emission vehicles.

1 Senator Muskie. You have already done that in that
2 other legislation. Why do we incorporate it here?

3 Mr. Billings. It is not getting anywhere. It would be a
4 way to move it.

5 Senator Muskie. All right.

6 Well, I have no objection to putting it in.

7 You mean, reenacting what we have already enacted?

8 Mr. Billings. Right, with the approval of the Congress.

9 Mr. Meyer. One technical thing on this line; you have got
10 State inspection. What kind of level will we have the obvious
11 problem of some States that do not want vehicle inspection?

12 Mr. Billings. We have in the draft grants. It is
13 the implementation plan approval. In order to get their implemen-
14 tation plan approved, they would have to have State inspection
15 systems as part of Title I.

16 One final thing, and that is --

17 Senator Muskie. In other words, if they decide not to
18 bother with the implementation plan, the Secretary then wishes
19 to get an implementation plan, then we don't have any inspection
20 system?

21 Mr. Billings. But the Secretary will have authority to
22 test classes and models of vehicles and if he finds a
23 representative sample are failing to meet this emission standard
24 on the road he could require a recall of those vehicles. So he
25 would have a way of double-checking.

1 Senator Muskie. That would be putting the burden on the
2 industry for a State's failure to provide an inspection system,
3 that would put the burden on the operator to keep the vehicle --

4 Mr. Jordan. Why don't you just ban the operation of un-
5 inspected vehicles?

6 Mr. Meyer. Who is going to enforce that?

7 Mr. Jorling. I like what Barry is going to suggest, I think,
8 and I wish you would suggest it.

9 Mr. Meyer. Go ahead, Tom.

10 Senator Muskie. Which one of you wants to be Alphonse?

11 Mr. Jorling. I would defer to Barry.

12 Mr. Meyer. The alternative has got to be that he has
13 got to have stand-by authority to conduct inspection himself,
14 but where is he going to get the manpower to do it?

15 Mr. Royce. There is another alternative which was presented
16 to this committee in the draft legislation in the 1967 Act which
17 provided the withholding of highway funds.

18 Now, one of the principal reasons that we rejected that
19 feature was that at that time there wasn't the technology
20 for testing, but the only thing we had seen was a \$50,000
21 installation in California. But certainly by 1975, this will
22 be, the little black box will be available and Atlantic-Rich-
23 field showed us one the other day that was a \$2,000 piece of
24 equipment. It is not the complete answer, but it is a
25 good test and a very fast readout, a matter of seconds, on

1 hydrocarbons and carbon monoxide. It doesn't yet fingerprint
2 nitrous oxides but that is the next step.

3 Senator Muskie. Well, I think what you have to do is
4 provide a hundred percent Federal grant to support State
5 inspection systems, wouldn't you, to do it? You can't force
6 a sovereign State to set up an inspection system. Any other
7 technique you are talking about here depends upon the States
8 coming forward, even if it is a 90 percent grant, putting up
9 some of their own dough, and they may not want to.

10 Senator Boggs. No, but you can require a car to be inspected
11 if he is going to travel in interstate commerce.

12 Senator Muskie. And interstate begins in his front yard,
13 or back yard.

14 Senator Boggs. Yes. He has got to go somewhere to get
15 it inspected and even if he goes to -- if the State doesn't
16 want to set up one, to put it on the owner, and he can go
17 to his garage, then and get a certificate.

18 Senator Muskie. What you are suggesting is that we
19 put this condition upon the operation of the automobile and
20 then set up a Federal grant program to help the States make
21 it possible for the motor vehicle owner to drive.

22 Senator Boggs. That is a possibility.

23 Mr. Jordan. You could even raise some revenues with the
24 sticker.

25 Mr. Billings. May I mention another point?

1 Senator Muskie. Go ahead.

2 I was about to drop my voice.

3 Mr. Billings. The statutory requirement that the Secretary
4 develop performance standards for used vehicle controls and
5 at such time as used vehicle devices are developed which meet
6 those controls, he could require them to be installed on used
7 cars on the road, or at least certify them so that the
8 States which wanted to go to used vehicles would have a guideline
9 against which to judge whether or not they wanted to require used
10 vehicles. In this grant, there is a provision for standards
11 of performance for used vehicle control devices and it would
12 require, as I read the draft, as a condition of resale of a used
13 vehicle, an uncontrolled used vehicle, they would have to
14 have a certified device, after those devices have been developed.
15 This would mean that you would get a gradual turnover of
16 increased control on used cars, which would expedite the
17 reduction in air pollution of vehicles.

18 Do you want to try that one, too?

19 Senator Muskie. All right, try it.

20 Is that it?

21 Mr. Billings. There was one more. The point that in
22 writing a standard into the law the one difficulty that we run
23 into is that the standard we have seen thus far is a function
24 of the test that was designed for the internal combustion engine.

25 Senator Muskie. If the test changes, you are in trouble.

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23 into is that the standard we have seen thus far is a function
24 of the test that was designed for the internal combustion engine.

25 Senator Muskie. If the test changes, you are in trouble.

1 Senator Muskie. All right, write that in, too.

2 Now does that cover your list?

3 Mr. Billings. It is a pretty good Christmas tree.

4 Senator Muskie. Well, there is one other thing we ought to
5 throw into the pot, while we are on this subject, even if you
6 haven't got it finally formulated yet, but it fits into this, so
7 we might as well throw it in. And that is the question of
8 national emissions, national ambient air quality standards.

9 Leon suggested that we might consider as an alternative to
10 that national emission standards from stationary sources, with
11 a deadline. With regional ambient air quality standards, that
12 would then enable the pollution problem areas to, you know, crank
13 in tougher requirements for all sources.

14 National emission standards would be related to what, health
15 effects? We can't do that.

16 Mr. Billings. National emission standards would be related
17 to technology.

18 Senator Muskie. Technological disabilities.

19 Mr. Billings. Senator Baker's.

20 Senator Muskie. Yes. That way, you see, the used motor
21 vehicle, and that is a big problem child on this power stations.
22 Already we had a hearing in another committee yesterday that
23 would put the used motor vehicle within the control of the region,
24 and it would decide what it would want to do with respect to
25 restricting their use, and so on, in accordance with whatever

1 regional ambient air quality standards they felt were essential
2 to the well-being of their people. This has been the big stumbling
3 block to the national ambient air quality standards.

4 As you know, we discussed it before. So this way, you would
5 have your national standards for moving sources, for new
6 sources, or new stationary sources of pollution, and for the
7 automobile. New motor vehicles -- all emission-type controls,
8 rather than ambient air.

9 Senator Boggs. Did I hear that one region has a different
10 standard for automobiles than another region?

11 Senator Muskie. Well, certainly with respect to their
12 mobility. Now with respect to used cars, this is the question.
13 Used cars, of course, would move out of their region, and travel ---

14 Senator Boggs. They travel all over.

15 Senator Muskie. And of course the region could not control
16 the emissions from the performance of used cars coming in,
17 visitors, tourists, and so on.

18 Mr. Billings. That is why I had the suggestion of having
19 provision for application for resale.

20 Mr. Guard. Mr. Chairman, may I suggest a national emission
21 standards for old plants?

22 Senator Muskie. Yes, we have already got them in here on
23 new plants.

24 Mr. Jorling. Would that require variance from the national
25 ambient standard approach, if the national ambient standard is

1 that standard which is protective of health? In other words,
2 would you abandon that, in favor of restoring the old regional
3 approach, with Secretarial approval, presumably, of the regional
4 ambient standard, so that it was at least protective of the pub-
5 lic health?

6 What I am getting at is the regional approach, or the national
7 approach, I think both of them would be compatible with going
8 back to ---

9 Senator Muskie. I don't know if the national ambient air
10 standard approach is compatible with national emission standards
11 or not.

12 Mr. Guard. National emission standards, in effect, this is
13 having a Secretary almost write the implementation plan for every
14 area. He would set by type of plant, I assume, by type of
15 process, and by the age of plant, a stack standard -- well, for
16 every plant in the country, I guess.

17 Mr. Billings. There are about 19 major sources of indus-
18 tries which would be subject to such emission controls or perform-
19 ance standards, really, for existing plants. The purpose of
20 retaining an air quality standards approach is that even with
21 effective control of emissions, based on available technology,
22 without even any discussion of economic feasibility, it is very
23 likely that in certain areas, such as Gary, New York City, St.
24 Louis, you may not achieve a degree of air quality that is pro-
25 tective of public health.

1 It is a regional thing. That is something that is going to
2 be recognized on a regional basis, not on a national basis, whether
3 or not those national standards, when applied to plants within a
4 region, will achieve a level of ambient air quality protective
5 of public health.

6 If it is not, then the region will have to make additional
7 adjustments. Now, those adjustments may include closing certain
8 plants. It may require the relocation of certain facilities.
9 But those would be operations imposed on the regions -- not
10 operations, obligations imposed on the regions.

11 The value of this approach would be that you could reduce
12 from what may be as much as a hundred months, nine years, for
13 compliance for pollutants for which criteria have not been issued,
14 to about four years, and early improvement in air quality generally,
15 because the technological response to an air pollution
16 problem is one that can be applied much more rapidly.

17 There are a lot more engineers available to tell you what
18 is available in control systems than there are scientists to tell
19 you what the health effects of the criteria are. Every time you
20 discuss this criteria thing, and discuss pushing it forward, we
21 have been told, "No, it is something to take 24 months; it is
22 going to take more than the 18 months we have got," and it
23 keeps pushing this deadline until we are talking about an act
24 that is not going to become effective for ten years, not four
25 years.

1 Mr. Royce. And would the regional standards require the
2 Secretarial approval?

3 Mr. Billings. As to public health protection.

4 Mr. Royce. So ---

5 Mr. Billings. In fact, you would still have a national
6 underpinning of public health. In other words, no region could
7 have a standard of air quality that exceeded a public health
8 level, but you would still have your regional variation, and your
9 region would act to make a decision between those two levels.

10 Mr. Royce. And what we would face, then, in terms of avail-
11 able control technology, would be in certain regions no more
12 industrial expansion.

13 Mr. Billings. That's true.

14 Senator Boggs. It would be one region competing against
15 the other.

16 Mr. Royce. Sir?

17 Senator Boggs. One region competing against the other.

18 Mr. Royce. Yes. And that's probably best for the country.

19 Senator Muskie. Well, we are pushing up against that
20 ceiling anyway. It is inevitable, isn't it? It is inevitable
21 that somebody is going to have to reach the conclusion in some
22 areas of the country that there ought to be no more, you know,
23 economic growth, that has any pollution capability at all.

24 Mr. Royce. We have reached that in water pollution already
25 in certain areas. On the Kanawha River in West Virginia, they

1 can't expand.

2 Senator Muskie. That is correct, and you have to recognize
3 it sooner than later, and at least create the machinery for
4 dealing with it.

5 Mr. Jordan. Mr. Chairman?

6 Senator Muskie. Now what we are talking about, then, is the
7 addition of emission standards for older plants.

8 Senator Boggs. The same as new.

9 Senator Muskie. The same as new. They won't be the same
10 standards, I don't think.

11 Mr. Billings. The technical responsibilities will obviously
12 be different. You can't apply a new process.

13 Senator Boggs. But the emission standards will be the same.

14 Mr. Billings. The emission standards will be different,
15 because the standards will be based on ---

16 Senator Muskie. What is technically feasible.

17 Mr. Billings. They talk about what is technically feasible
18 With an old plant, you are basically talking about some kind of
19 add-on device for input change; with a new plant, you could be
20 talking about a basic change in the process, a basic oxygen
21 furnace, opposed to an open-hearth furnace. A new plant could
22 make that decision.

23 Senator Muskie. And as defined, in the hearings on the '67
24 Act, National Standards, these terms, are minimal standards. As
25 they would be in -- I don't know, they are not the minimal in the

1 ambient air concept that we are discussing, but they were not
2 maximum. They were something less than maximum.

3 And so these standards would be standards applicable nation-
4 ally, and there ought to be the right and the authority within
5 regions to tighten them up to suit the regional needs. So I
6 don't see how this could fit into national ambient air quality.

7 Mr. Royce., Can't measure it.

8 Senator Muskie. You would have to have regional ambient air
9 standards, and national emission standards.

10 Mr. Cummings. Unless you required regional standards to
11 protect public health, you would have to require the same for
12 the national.

13 Mr. Billings. But you couldn't implement national. You
14 would have to implement it regionally.

15 Senator Muskie. You would have to implement it regionally,
16 so the regional ambient air quality ought to be related to the
17 public health as a minimum, but the regions can go beyond that,
18 if they want. They don't need to be limited to public health.

19 They can go beyond it, just as they do now, under the present
20 law. They are not limited to public health consideration under
21 the present law.

22 Mr. Billings. That's right, no. That is their base.

23 Senator Muskie. Yes.

24 Mr. Jorling. But I am still troubled why you have to aban-
25 don the national ambient standard protective of health.

1 Mr. Billings. You are not abandoning it.

2 Senator Eagleton. Is that the floor?

3 Senator Muskie. The standard is applied on a regional basis.

4 Mr. Jorling. I realize that. I am just trying to get con-
5 ceptually ---

6 Senator Muskie. No region's ambient air quality standards
7 are going to be approved unless they meet the standard of public
8 health.

9 Mr. Jorling. Again, that gets to the question, which do you
10 set first? Do you set the national ambient air quality standard
11 protective of health, or does the Secretary make that judgment
12 when the region submits to him an ambient standard for that
13 region?

14 Mr. Billings. It doesn't really make any difference, does
15 it?

16 Mr. Jorling. I don't know.

17 Mr. Billings. As long as the standard is no less than what-
18 ever the Secretary determines to be protective of public health.

19 Senator Muskie. You see, all you are eliminating here are
20 those areas which have a quality of air that is better than the
21 minimum necessary for public health. All the problem areas with
22 a quality of air that is deleterious to health are going to come
23 under the same standards, insofar as public health is concerned.

24 Of you are not going to call it a national standard, because
25 you are not applying it to every region in the country?

1 Mr. Billings. That's why I am troubled.

2 Senator Eagleton. Aren't you applying it to every region
3 in the country, in a sense that no region of the country can ---

4 Senator Muskie. Go below it.

5 Senator Eagleton. Be dirtier than.

6 Senator Muskie. I don't know whether "above" or "below" is
7 the right word to describe it.

8 Mr. Royce. Dirty.

9 Senator Muskie. Dirty, yes, so in that sense, yes. But
10 the control mechanism is triggered in the problem areas, because
11 you don't have to get an implementation plan in an area that
12 doesn't have an air quality -- or do you?

13 Mr. Billings. The fact that the design of the law requires
14 the Secretary to designate any regional area in which he believes
15 the ambient air quality was for any pollutant less than what was
16 adequate to protect public health, that would be your triggering
17 mechanism.

18 Then any area outside that would be covered by the national
19 emissions standards, and that would be assumed for the purpose of
20 the law to be once the national emission standards were on, would
21 be protective of the public health. If he later found that
22 region was failing, he would designate it; then they would be
23 required to make the changes necessary to close that gap.

24 Mr. Jorling. I am trouble.

25 Mr. Guard. Leon, aren't you removing some of the discretion

1 of the regions and the states in designing their implementation
2 plan? That the Secretary would impose emission standards on
3 all old plants himself, so that the area the regions would have
4 to work in in the implementation plan would be much smaller.

5 Senator Muskie. No, because they could impose more restric-
6 tive controls on old plants. And they would not have the
7 authority to do it, at least, make no practical difference.
8 Because they have less restrictive emission controls, more
9 restrictive ones ---

10 Mr. Jordan. They wouldn't really impose more restrictive
11 controls if the national controls are based on technical feasi-
12 bility without closing down the plant.

13 Mr. Billings. This is a control alternative. It was recog-
14 nized in the '67 Act, is plant closure.

15 Mr. Jordan. It seems to me that the great moral force of
16 the Federal Government's setting the national ambient air quality
17 standards derived from the fact that it was protective of public
18 health. I think when you begin to require localities to make
19 essentially economic decisions, when you are achieving ---

20 Senator Muskie. That is still related to public health.

21 Mr. Jordan. Well, if you impose a national emission standard
22 on an existing industrial facility that is tougher than the standa-
23 that would otherwise be necessary for that same facility to meet
24 the national ambient air quality standard in that area, then you
25 are imposing an economic hardship that is not necessary for the

1 achievement of public health standard.

2 Senator Muskie. Well, do you really think that the tech-
3 nology can be that precisely tailored to ambient air quality
4 standards? I mean, if you have got a health problem in an area,
5 in a region, the chances are that you are going to have to
6 impose the maximum technology that is available to these sta-
7 tionary sources? '

8 Mr. Jordan. That is correct, sir.

9 Senator Muskie. You can't have that kind of control.

10 Mr. Jordan. But what of the instance in which you don't
11 have a health problem, and yet you are still requiring this
12 degree of control to be imposed, and be on a highly depreciated
13 or marginal facility? You may force the closing of the facili-
14 ties, with 300 jobs, when it is not even necessary to meet pub-
15 lic health standards.

16 Senator Muskie. There are two advantages to this. One --
17 well, that is a problem.

18 Mr. Jordan. That should be a local decision.

19 Senator Muskie. We ought to focus on it, but nevertheless,
20 the advantages, of course, to national emission standards, if
21 you use maximum technology now, at least you are taking the
22 maximum step you can today to prevent the creation of a problem
23 tomorrow.

24 Mr. Jordan. That is great for new facilities.

25 Senator Muskie. What?

1 Mr. Jordan. That is great for new facilities, which is
2 what we have already got in the bill.

3 Senator Muskie. I know, but even for existing.

4 Mr. Billings. Jim, think of it in terms of the regional
5 applications, where you say to the dye plant, in Haverhill,
6 Massachusetts, that because of the air quality in that region,
7 you have to close your plant, as compared to the dye plant in
8 Chattanooga, Tennessee, where the regional situation is not nearly
9 as bad, so you can let him continue operating without any controls.

10 Don't you create there ---

11 Mr. Jordan. But it doesn't follow that you should shut down
12 all of the plants all over the nation, simply because you have one
13 that might be shut down in an implementation plan.

14 Senator Muskie. If what you are talking about is all of
15 the plants all over the nation, then you don't have feasible
16 technology.

17 Mr. Jordan. That is an exaggeration, but so was Leon's
18 example.

19 Mr. Brayman. Mr. Chairman, I assume that one of the advan-
20 tages of this is that at least Leon would say it would speed up
21 the proposal. I would think maybe, let me just offer a hypothesis.
22 You set a standard on steel plants in Gary, maximum technology,
23 in effect, all steel plants in the area, I assume, would then
24 have to wait until an implementation plan for Gary, Indiana, is
25 a requirement for one very simple reason.

1 It would be an unfair burden to make them put on the maximum
2 equipment feasible, and then a year later, with an implementation
3 plan, force them to close. You in effect will have confiscated
4 their capital by making them put on a very expensive device,
5 and then one year later, or six months later, whenever an imple-
6 mentation plan comes in ----

7 Senator Muskie. Wait a minute. We are not talking about
8 a deadline of next year, you know. We are talking about, you
9 know, '75, '76, and if the implementation plans haven't been
10 supplemented before then, somebody is falling down administra-
11 tively.

12 Mr. Brayman. True.

13 Senator Muskie. You are going to have your implementation
14 plans before the deadline we are talking about.

15 Mr. Billings. Let's assume it takes the agency two years
16 to develop the national emission standards for the 19 sources,
17 the 19 major industries, and three years to apply them. That's
18 a five-year period.

19 Now in that period, you are going to have a pretty valid
20 cross-check against anyone. If they can't give you the cross-
21 check within two years, then the whole act is not worth having.
22 If they can't tell you in two years, basically, where the health
23 problems are, the major kinds of pollutants that are coming from
24 these major industries, then the committee really has to recon-
25 sider any kind of a deadline.

1 Mr. Brayman. Well, if you are talking about two years and
2 three years to implement, why can't you again go the same way
3 with 17 months and four years?

4 Mr. Billings. That is for existing pollutants, but according
5 to the information we have, we have 85 months.

6 Mr. Brayman. You are talking about existing pollutants.
7 You are talking about 98 percent of the volume of pollution.
8 Would an emission standard tell you how much arsenic you can put
9 in it? Would it tell you how much of these relatively exotic
10 things you can put out, or would it be pollutant by pollutant?

11 Mr. Billings. I would assume the emission standard would
12 go to the amount of emissions gross and specific for the par-
13 ticular kind of plant involved. In other words, in a steel plant,
14 or, let's say, a ferrous metal smelter, and the cadmium, lead,
15 zinc and arsenic, the emission standard would go to all of those
16 as well as the particulate.

17 I don't see how it could avoid it. In other words, one of
18 the real difficulties we didn't envision in the '67 Act was that
19 by going to the pollutant level, you raised this question, going
20 pollutant by pollutant, you set up a situation where an industry
21 that had four pollutants coming out of its stack only required
22 control for two, might have to come back two years later when
23 a new criterion was released, for control of the remaining two.

24 But if he had them all identified at once, through one process
25 change or one control technology application, he might have been

1 able to control them. So you very likely are going to impose
2 an advantage on the guy, rather than a disadvantage.

3 Mr. Royce. Mr. Chairman, since we are contemplating a
4 major shift in direction, may I suggest that the staff give
5 thought to two other aspects?

6 Senator Muskie. That is a vote?

7 Mr. Royce. That's a vote. Well, that's why I said the
8 staff give thought to it.

9 One, a question of loans for existing facilities, some of
10 which will be marginal, in terms of meeting emission standards.

11 Senator Muskie. Well, may I ask, Bill, before you leave,
12 are you sufficiently interested in this for us to pursue it fur-
13 ther, this approach?

14 Senator Spong. Surely.

15 Senator Eagleton. I am interested. I have got three
16 quickie questions, if I bounce them off real quick; that whole
17 scenario that Leon spelled out, going back to cars, you know, we
18 got on the stationary pretty quick, that is an entirely new
19 predication from page 37 we were talking about.

20 I mean, that is all predicated on the internal combustion
21 engine, and making it as clean and as utilitarian as possible.
22 There is nothing in it about forcing them into something else.

23 Senator Muskie. Well, yes, these standards that we are
24 talking about, I am told, can't be achieved by the internal com-
25 bustion engine.

1 Senator Eagleton. Oh, no, some he was talking about,
2 compression ratios, horsepower.

3 Mr. Billings. That may be. That may be. We are not tell-
4 ing the industry what they have to use, we are just telling them
5 what they have to achieve. So it is a performance standard,
6 not a technological standard.

7 Senator Eagleton. All right, performance standard, and the
8 language you say by whatever mechanical device.

9 Mr. Billings. Whatever method is necessary.

10 Senator Eagleton. Method best designed to achieve it. All
11 right.

12 My second question is this: Does your whole thing about
13 emission standards and what is national and regional enforce-
14 ment, isn't it the chicken and the egg both? It all starts with
15 criteria, doesn't it? All starts with criteria?

16 Mr. Billings. No.

17 Mr. Royce. Not now.

18 Senator Eagleton. It had to start with criteria issued by
19 Middleton?

20 Senator Muskie. Have to for the ambient air quality. I
21 don't think it will have to for the emission.

22 Mr. Royce. Not for the emission standards. Technology is
23 the test.

24 Mr. Grundy. For the regions, it would.

25 Senator Eagleton. Criteria to tell me what harms my health,

1 right? A big book, and it says .30.

2 Senator Muskie. We will still have to have criteria.

3 Mr. Billings. But they will operate independently of the
4 national emission standards until at some point down the line
5 we put the two together.

6 Mr. Jordan. How do you envision setting national emission
7 standards for pollutants for which criteria have not been
8 developed?

9 Mr. Royce. Technology triggers emission standards, criteria
10 trigger ambient air standards, whether regional or national.

11 Mr. Billings. You used a phrase of national standards of
12 performance for specific industries, and those would be trans-
13 lated into emission limitations, based on the available tech-
14 nology. They would not be based on pollutants per se, though
15 they would hit all the pollutants and come out.

16 They would not be based on criteria. They would be a tech-
17 nological response, including process changes; they would be
18 fuel changes, whatever is required to achieve that standard of
19 performance, translated into emission limitation.

20 Mr. Jordan. Unrelated to the resulting air quality.

21 Senator Eagleton. How do we know what we are doing if we
22 don't know whether it harms my health or not?

23 Mr. Billings. We are going to do that, too, but that is
24 going to proceed simultaneously, so we don't have one to be
25 done first and then the other, because in most instances, what

1 you achieve through the national performance standards for new
2 and existing sources of pollution should result in an air quality
3 that will protect your health. But let's make that decision down
4 the road, three years, rather than take three years to make the
5 decision on what is going to harm your health, and then five
6 years to impose the control system.

7 Senator Eagleton. Why take something out of the air on a
8 guess or performance basis? Maybe we ought not to take it out
9 of the air. I mean, maybe it is just innocuous. .X of some-
10 thing in the air, but you are saying we are going to take it out
11 anyway, because we don't know it is going to harm my health or
12 not.

13 Mr. Guard. You are proceeding industry by industry, right?
14 All of any pollutants?

15 Mr. Billings. Senator, one further point. As Middleton has
16 pointed out, that with all of this criteria stuff, and all of the
17 work on public health research, we have never had and may never
18 guess as to what these pollutants do together in the atmosphere,
19 The only way to be sure we have really good health is to take
20 the pollutants out.

21 Senator Eagleton. Take them all out.

22 (Whereupon, at 5:50 p.m. the subcommittee adjourned, to
23 reconvene at the call of the Chair.)
24
25